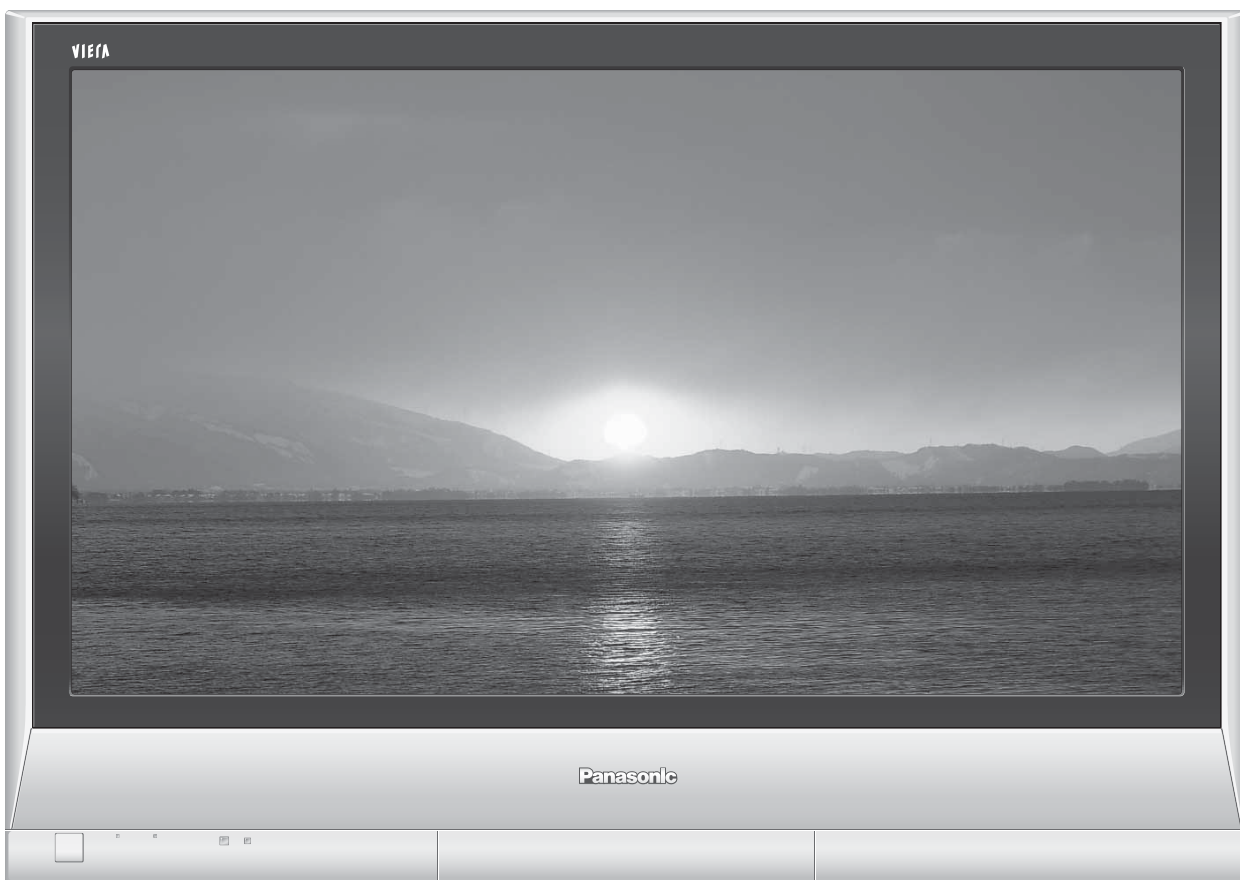


Panasonic®

Operating Instructions Plasma Television

Model No. **TH-42PX45EH**

VIERA



DVB®

HD
ready

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

English

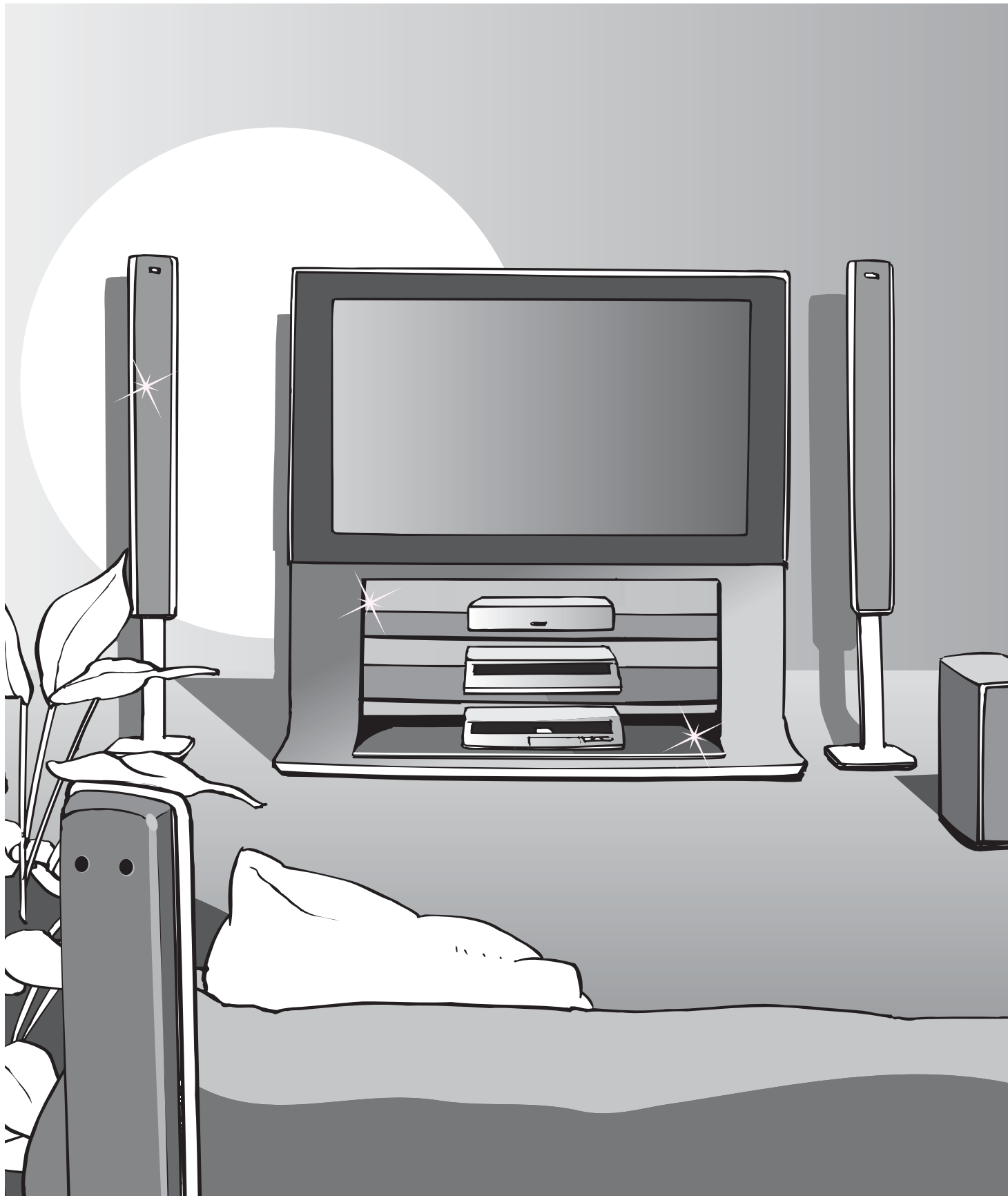
Please read these instructions before operating your set and retain them for future reference.
The images shown in this manual are for illustrative purposes only.



TQB0E0415U

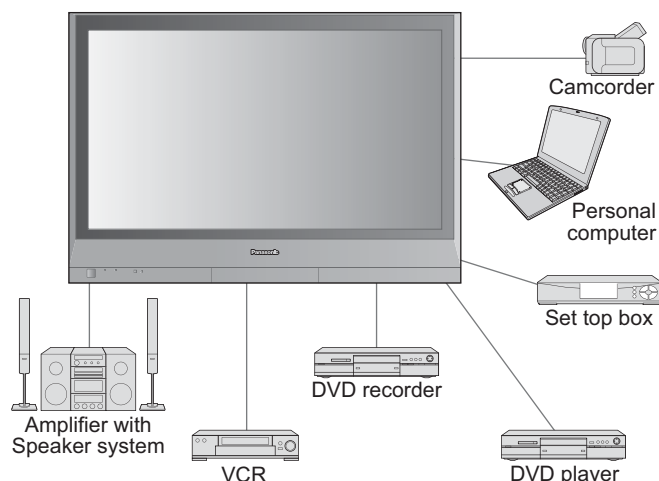
Turn your own living room into a movie theatre!

Experience an amazing level of multi-



media excitement

Enjoy rich multi-media



Contents

Be Sure to Read

- Safety Precautions 4
(Warning / Caution)
- Notes 5
- Maintenance 5

Quick Start Guide

- Accessories / Options 6
- Identifying Controls 7
- Connection 8
- Auto Setup 9

Enjoy your TV!

Basic Features

- Watching TV 10
- Viewing Teletext 12
- Watching Videos and DVDs 14

Advanced Features

- How to Use Menu Functions 16
(picture, sound quality, etc.)
- Advanced DVB Settings (DVB) 18
(pay-TV, time, etc.)
- Editing and Setting Channels (Analogue) 20
- Editing and Setting Channels (DVB) 22
- Displaying PC Screen on TV 25
- External Equipment 26
(Q-Link / Control with HDMI / Connections)

FAQs, etc.

- Technical Information 32
- FAQs 36
- Licence 39
- Specifications 39

Safety Precautions

Warning

Handling the mains plug and lead

- Insert the mains plug fully into the socket outlet. (If the mains plug is loose, it could generate heat and cause fire.)
- Ensure that the mains plug is easily accessible.
- Ensure the grounding pin on the mains plug is securely connected to prevent electrical shock.
 - An apparatus with CLASS I construction shall be connected to a mains socket outlet with a protective earthing connection.
- Do not touch the mains plug with a wet hand. (This may cause electrical shock.)
- Do not damage the mains lead. (A damaged lead may cause fire or electrical shock.)
 - Do not move the TV with the lead plugged in the socket outlet.
 - Do not place a heavy object on the lead or place the lead near a high-temperature object.
 - Do not twist the lead, bend it excessively, or stretch it.
 - Do not pull on the lead. Hold onto the mains plug body when disconnecting lead.
- Do not use a damaged mains plug or socket outlet.

If you find any abnormality, remove the mains plug immediately!
(such as strange smell or smoke)

AC 220-240 V
50 / 60 Hz

Do not remove covers **NEVER** modify the TV yourself

(High-voltage components may cause serious electrical shock.)

- Have the TV checked, adjusted, or repaired at your local Panasonic dealer.

Do not place foreign objects inside the TV

- Do not let metal or flammable objects drop into the TV through the air vents (fire or electrical shock may result).

Do not expose to direct sunlight and other sources of heat

- Avoid exposing the TV to direct sunlight and other sources of heat. To prevent fire never place any type of candle or naked flame on top or near the TV.

Keep liquids away from the TV

- To prevent damage which may result in fire or shock hazard, do not expose this appliance to dripping or splashing.
- Do not place containers with water (flower vase, cups, cosmetics, etc.) above the TV. (including on shelves above, etc.)

■ Do not place the TV on an unstable surface

■ Use only the dedicated stands / mounting equipment

- Using an unauthorized stand or other fixtures may make the TV shaky, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
- Use optional stands / mounts (p. 6).

Notes

Caution

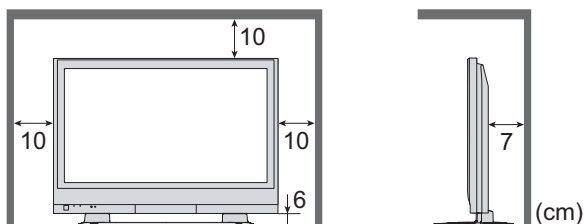
■ When cleaning the TV, remove the mains plug

(Cleaning an energized TV may cause electrical shock.)

■ When TV will not be used for a long time, remove the mains plug

- This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.

■ Allow sufficient space around the TV for radiated heat



■ Do not block the rear air vents

- Blocked ventilation by curtains, etc. may cause overheating, fire or electrical shock.



Remember not to keep still pictures on the screen for extended lengths of time

Such still pictures cause after-images on the plasma screen if they are displayed for a long time. These after-images are not considered malfunctions and are not covered by the warranty.

Typical still images

- Channel number and unique logos
- Image displayed in 4:3 mode
- Video game
- Computer image



To decrease the chance of after-images, a screen saver will be automatically activated after a few minutes if there is no signal and if there is no operation in AV mode. (p. 37)
The screen saver will be automatically deactivated when a signal is detected or an operation is executed.

■ Keep the TV away from these equipment

- Electronic equipment
In particular, do not place video equipment near the TV (electromagnetic interference may distort images / sound).
- Equipment with an infrared sensor
This TV also emits infrared rays (this may affect operation of other equipment).

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

Daily care: Gently wipe the surface clean of dirt by using a soft cloth.

Major contamination: Wipe the surface clean using a soft cloth dampened with clean water or water containing a small amount of neutral detergent. Then, using a soft dry cloth, evenly wipe the surface clean until it is dry.

Caution

- The surface of the display panel has been specially treated and may be easily damaged.
Do not tap or scratch the surface with your fingernail or other hard object.
- Use care not to subject the surface to bug repellent, solvent, thinner, or other volatile substances (this may degrade surface quality).

Cabinet

Daily care: Wipe the surface clean using a soft dry cloth.

Major contamination: Dampen a soft cloth with clean water or water containing a small amount of neutral detergent. Then, wring the cloth and wipe the surface clean with it. Finally, wipe the surface clean with a dry cloth.

Caution

- Use care not to subject the TV's surfaces to detergent.
(A liquid inside the TV could lead to product failure.)
- Use care not to subject surfaces to bug repellent, solvent, thinner, or other volatile substances (this may deteriorate the surface by peeling the paint).
- Do not allow the cabinet to make contact with a rubber or PVC substance for a long time.

Mains plug

Wipe the mains plug with a dry cloth at regular intervals. (Moisture and dust may lead to fire or electrical shock.)

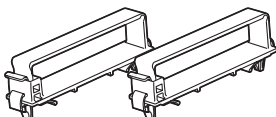
Accessories / Options

Standard accessories

- ☐ Remote Control Transmitter
 - EUR765108A



- ☐ Clamper (2)

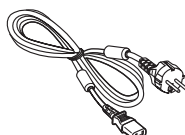


Check that you have the accessories and items shown ☒

- ☐ Batteries for the Remote Control Transmitter (2)
 - R6 (UM3)

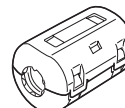


- ☐ Mains Lead

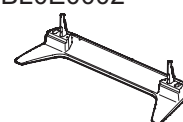


- ☐ Operating Instructions
- ☐ Pan European Guarantee Card

- ☐ Ferrite core
 - J0KF00000018



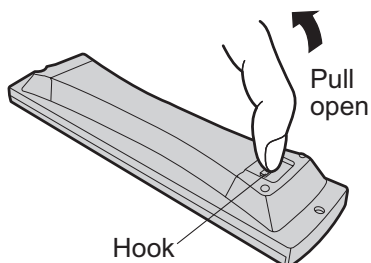
- ☐ Pedestal
 - TBL0E0001 or TBL0E0002 (equivalent to optional accessory TY-ST42P60W)



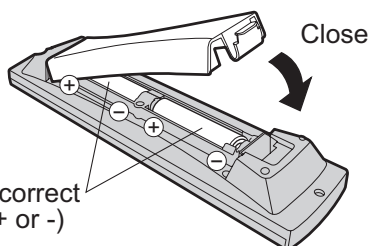
Read the manual of the pedestal for installation.

Installing remote's batteries

1



2



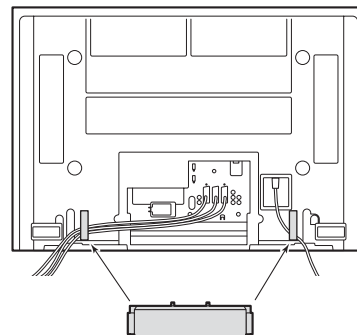
Note the correct polarity (+ or -)

Caution

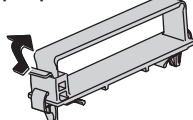
- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or breakup batteries.

Attaching the cable clammers

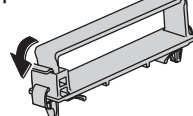
Rear of the TV



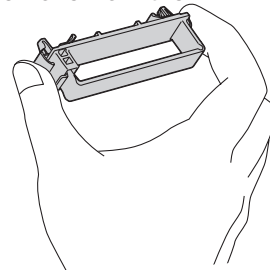
Snap open



Snap shut



Remove from the TV



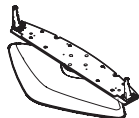
Push both side hooks and pull out

- Do not bundle the RF cable and mains lead together (could cause distorted image).
- Fix cables with clammers as necessary.
- When using the optional accessory, follow the option's assembly manual to fix cables.

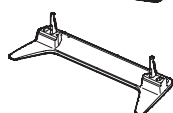
Optional accessories

Pedestal

- TY-ST42P600W

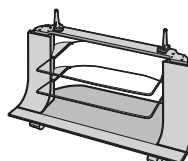


- TY-ST42P60W



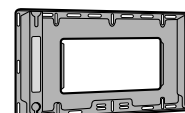
Plasma TV stand

- TY-S42PX60W



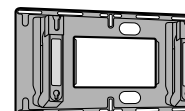
Wall-hanging bracket (vertical)

- TY-WK42PV3W



(angle)

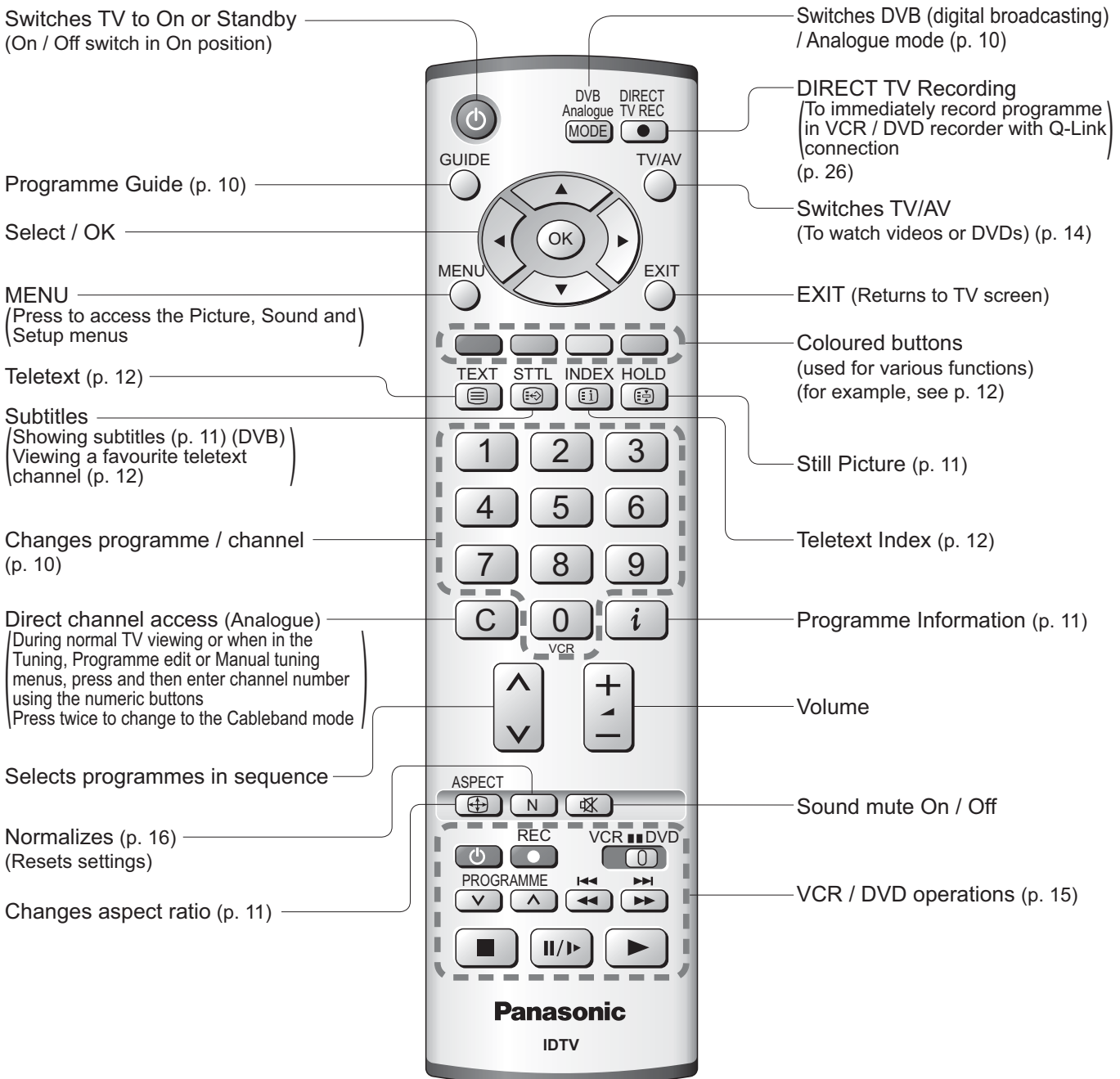
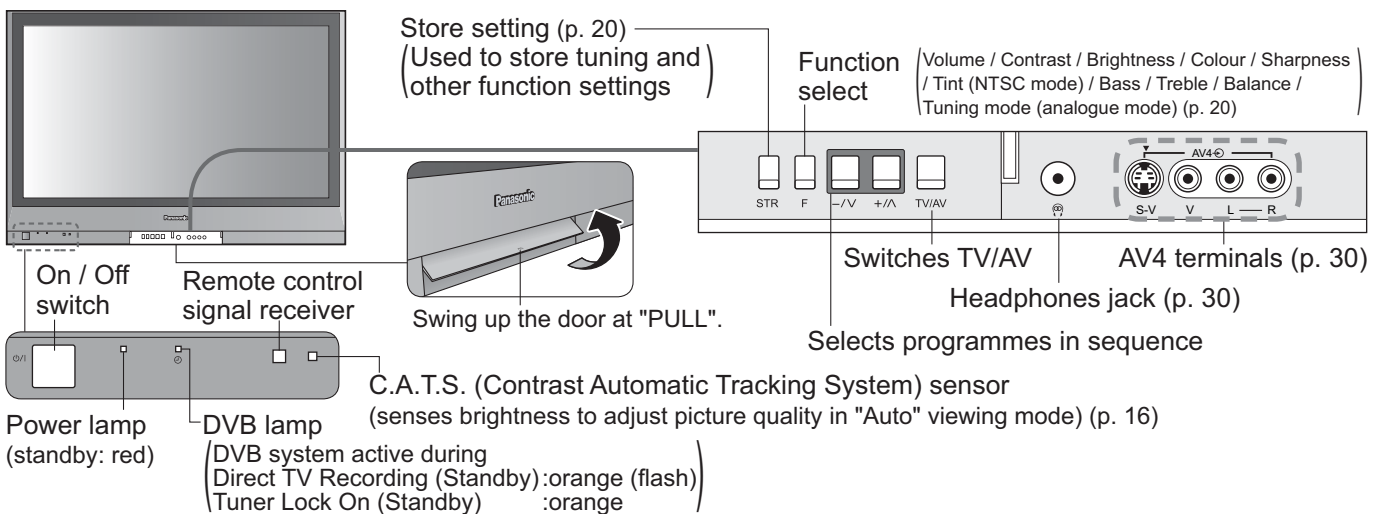
- TY-WK42PR2W



Caution

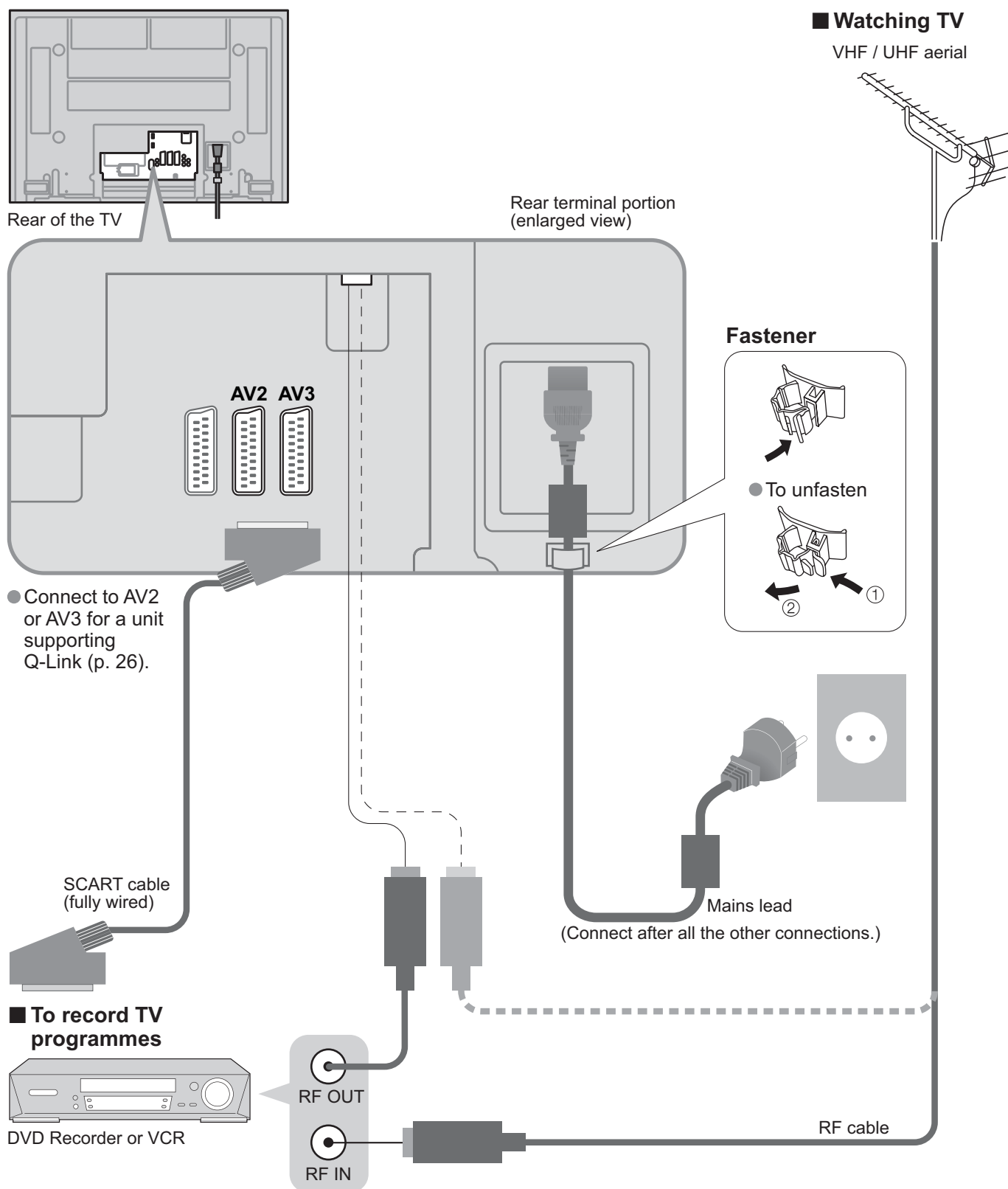
- In order to maintain the unit's performance and safety, be absolutely sure to ask your dealer or a licenced contractor to secure the wall-hanging brackets.
- Carefully read the instructions accompanying the plasma TV stand or pedestal, and be absolutely sure to take steps to prevent the TV from tipping over.
- Handle the TV carefully during installation since subjecting it to impact or other forces may cause product damage.

Identifying Controls



Connection

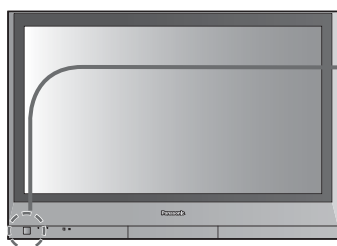
External equipments and cables shown in this manual are not supplied with this TV.
Please ensure that the unit is disconnected from the mains before attaching or disconnecting any leads.



Auto Setup

Search and store TV channels automatically.

These steps are not necessary if the setup has been completed by your local dealer.



1

Turn the TV On with the On / Off switch

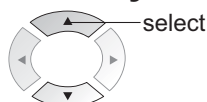


- You can now use the remote control to turn On the TV or turn the TV to standby mode. (Power lamp: On)



2

Select your country



3

Start Auto Setup



- Auto Setup will start to search for TV channels and store them.

DVB Auto Setup

Please Wait 1

Prog.	Channel	Service Name	NetID	TS ID	Quality
4	34	VOX	12302	4158	9
5	54	N24	12302	4158	9
6	54	ProSieben	12302	4158	9
7	54	KABEL1	12302	4158	9
8	54	SAT.1	12302	4158	9

This will take about 3 mins.

Exit



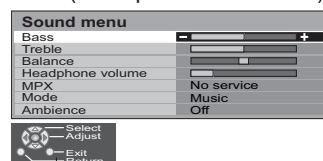
DOWNLOAD IN PROGRESS
PLEASE WAIT
Programme : 63
Remote control unavailable

- If Q-Link (p. 26) equipment is connected, analogue channel information is automatically downloaded to the equipment.



Need help with operations?

(example: Sound menu)



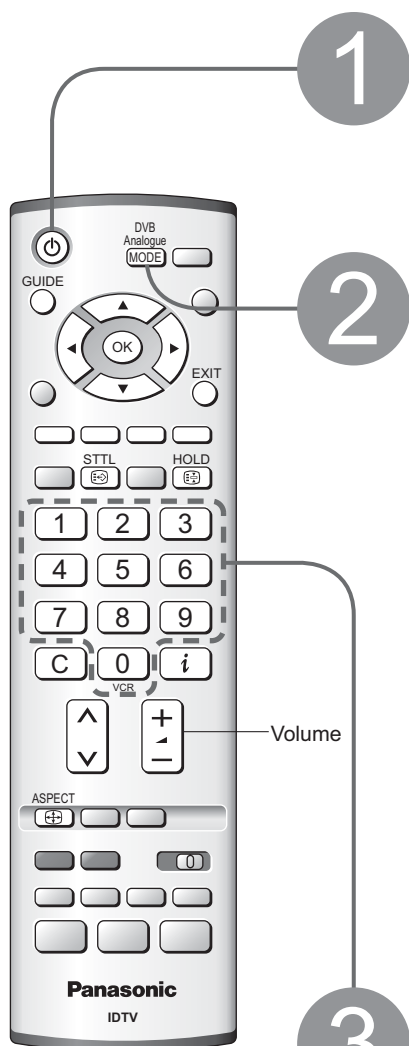
On-screen operation guide will help you.

Auto Setup is now complete and your TV is ready for viewing.



- To check programme list at-a-glance
➔ Programme Guide (p. 10)
- To edit channels
➔ "Editing and Setting Channels" (p. 20-24)

Watching TV



1

Turn power on



(for about 1 second)

- On / Off switch on TV should be On.

2

Select DVB (Digital Video Broadcasting) or Analogue



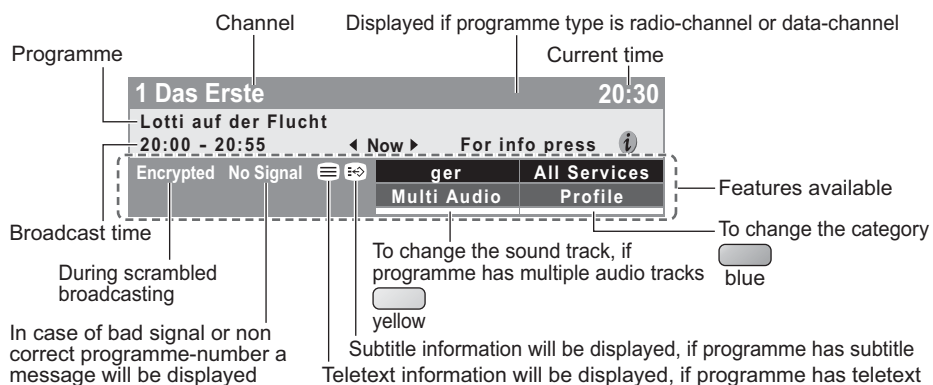
DVB



Analogue

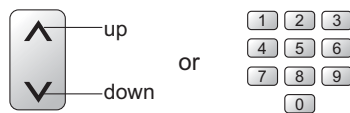


- Information banner



3

Select a programme number



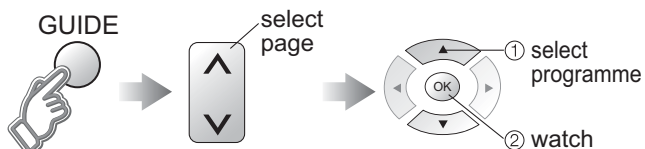
- To select the two-digit programme number, e.g. 39

→ 3 → 9 (in a short time)

Note

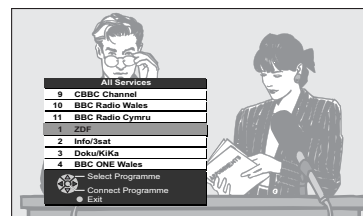
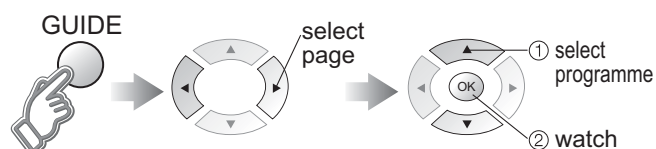
- To watch pay-TV (p. 18)

Select from the Programme table (Analogue)

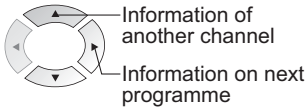


Analogue Programme Guide					
Prog.	Name	Chan.	Prog.	Name	Chan.
VCR :		CH21	13		
1	ABC	CH44	14		
2	ZDF	CH51	15		
3	RTL	CH41	16		
4		CH47	17		
5		CH23	18		
6		CH26	19		
7		CH58	20		
8			21		
9			22		
10			23		
11			24		
12					

Select from the Programme list (DVB)



■ Other Useful Functions (Operate after ③)

Hold	Freeze / unfreeze picture 
Display subtitles	Display / hide subtitles (DVB only)  ● To change the language, see "Preferred Language Setting" (p. 18) or "Subtitles" (p. 22).
Display information banner	Display programme information ● DVB  ● Details →  ● To hide →  ● To set display timeout (p. 18)    - Information of another channel - Information on next programme ● Analogue Displays channel only, after showing analogue information. (To go back → )
Change aspect ratio	Change the aspect ratio (p. 33)   ● Each press changes the mode. (Auto aspect / 16:9 / 14:9 / Just / 4:3 / 4:3 Full) (HD signal only) / Zoom1 / Zoom2 / Zoom3 While the bar is displayed  

Viewing Teletext

You can enjoy teletext broadcasting, including news, weather forecasts and subtitles, if this service is provided by the broadcasters.

What is TOP / FLOF mode?

In TOP / FLOF mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.

What is List mode?

In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. ("Store Frequently viewed pages", p. 13)

■ **To change mode** → "Teletext" in Setup menu (p. 16)



1

2

Switch to Teletext

● Displays Index (content varies depending on the broadcasters)

Select the page

1 2 3
4 5 6
7 8 9
0

or

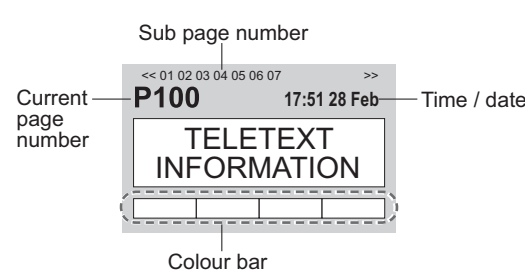
up
down

or

red green yellow blue
(Corresponds to the colour bar)

■ **To adjust contrast** → MENU → (Press three times) →

As the blue bar is displayed



■ **To return to TV**



■ **Using teletext conveniently**

Reveal hidden data

Reveal hidden words e.g. quiz page answers

MENU → red ● Re-hide → red

FULL / TOP / BOTTOM

MENU → green

P100
Broadcast
- + 150 200

→

P100
Broadcast
- + 150 200

→

P100
Broadcast
- + 150 200

(Expand the BOTTOM half)

HOLD

If you wish to hold the current page without updating
Stop or resume automatic updating

**INDEX**

Return to the main index page

**Call up a favourite pages**

- Call up the page stored in "blue".
- Factory setting is "P103".

(Analogue mode only)

View in multi window

Watch TV and Teletext in two windows at once



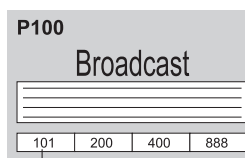
- Operations can be made only in Teletext screen.

Store frequently viewed pages

Store frequently viewed pages
 (only on first 25 Analogue channels on Programme Guide) in the colour bar

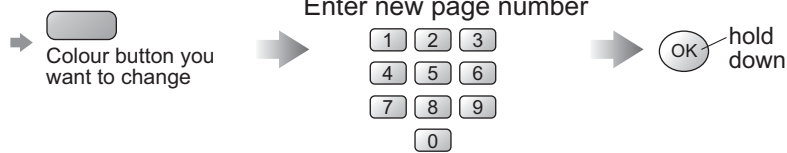
(List mode only)

As page is displayed  Corresponding colour button →  hold down

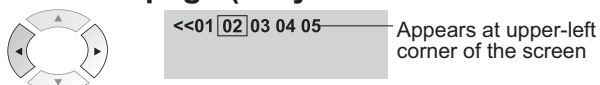


- Any channels can be stored in DVB mode.

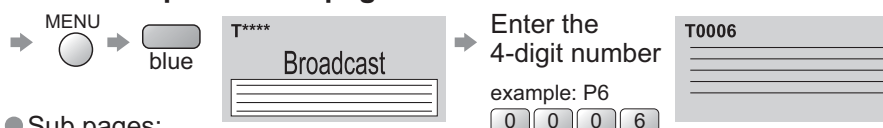
■ **To change stored pages**

**View sub page**

View sub page (Only when teletext is more than one page)



■ **To view specific sub page**



- Sub pages:
 The number of sub pages varies depending on the broadcasters (up to 79 pages).
 It may take some time for searching, during which time you can watch TV.

Watch TV while waiting for update

View the TV picture while searching for a teletext page

Teletext automatically updates itself when new information becomes available.
 Changes to TV screen temporarily



(You cannot change the channel.)

- The news page provides a function that indicates arrival of latest news ("News Flash").

Watching Videos and DVDs

It is possible to connect a variety of external equipment to the TV. Once the equipment is connected, use the following procedure to view the input.
To connect the equipment (p. 30)

1 With the equipment turned On
Select the external input

TV/AV (AV mode screen)

2 **Select the connector**
connected to the equipment

AV2

AV1 AV2/S AV3/S >>

blue

red

Displays the selected connector

HDMI1

<< AV4/S C/PC HDMI1/2

red green yellow

AV1 AV2/ AV3/

S-video S-video

green yellow blue

AV4/ Component/ HDMI1/

S-video PC HDMI2

● example: AV1 → red

PC → blue → yellow (twice)

● When colour bar disappears → Press any coloured buttons

● You can also select the connector using the TV/AV button on the front panel of the TV. Press the button repeatedly until you reach the connector to view.

■ To return to TV



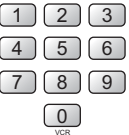
Note

- Automatic Input selection - Input mode is automatically switched from TV to AV mode when the equipment connected via SCART or HDMI terminal is operated. When the equipment is turned off, the TV is set to TV mode.
- If the external equipment has an aspect adjustment function, set to "16:9".
- For details, see the manual of the equipment or ask your local dealer.

Panasonic equipment connected to the TV can be directly operated with the remote control.

	VCR / DVD switch* Select VCR to operate Panasonic VCR or DVD equipment Select DVD to operate Panasonic DVD equipment or Player theatre
	Standby Set to Standby mode / Turn on
	Play Playback VCR / DVD
	Stop Stop the operations
	Rewind / Skip / Search VCR: Rewind, review (during playback) DVD: Skip to the previous track or title Press and hold to search backward
	Fast-forward / Skip / Search VCR: Fast-forward, cue (during playback) DVD: Skip to the next track or title Press and hold to search forward
	Pause Pause / Restart DVD: Press and hold for slow-motion play
	Programme Up / Down Select programme
	Record Start recording

*The remote control will be available for various Panasonic equipment with the following settings.

- ① Switch to select VCR or DVD you want to change → 
- ② Press and hold  while operating ② → Enter the code below (two digit code)  → Press 

VCR

Equipment	Code
VCR	10 (default)
DVD	11

DVD

Equipment	Code
DVD	70 (default)
Player theatre	71

Note

- After setting, execute operation confirmation.
- The respective VCR / DVD code is turned to the default when battery has been exchanged. Set it again.
- Depending on the model, operation may not be possible.

How to Use Menu Functions

Various menus allow you to make settings for the picture, sound, and other functions so that you can enjoy watching TV in your own way.



1

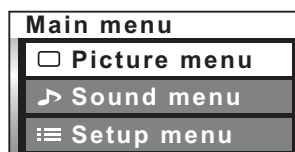
Display menu



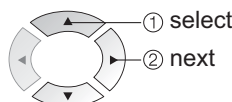
MENU ● Displays the functions that can be set (varies according to the input signal)

2

Select the menu

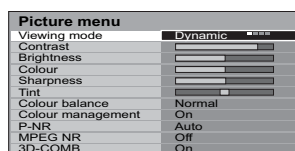


(example: Picture menu)

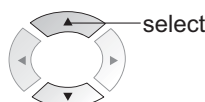


3

Select the item

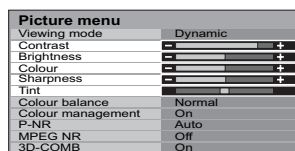


(example: Picture menu)

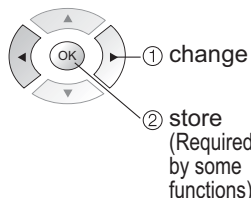


4

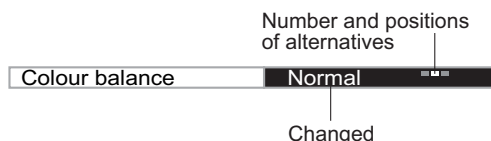
Adjust or select



(example: Picture menu)



Choose from among alternatives



Adjust using the slide bar



Go to the next screen



To reset the setting



To return to TV



To return to the previous screen



Note

- To initialize all settings, use "Shipping condition" (p. 32).

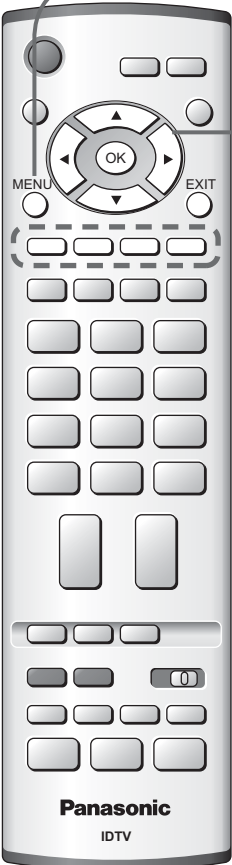
Menu list

Menu	Item
Picture menu	Viewing mode
	Adjust by each viewing mode
	Contrast, Brightness, Colour, Sharpness
	Tint
	Colour balance
	Colour management
	P-NR
Sound menu	MPEG NR
	3D-COMB
	Bass
	Treble
	Balance
	Headphone volume
	MPX
Setup menu	Mode
	Ambience
	HDMI1 input
	Q-Link
	AV2/AV3 out
	Control with HDMI
	Teletext
Tuning menu	Off timer
	Text language
	Side panel
	Power save
	Programme edit
	Auto setup
	Manual tuning
DVB Setup Menu	Fine tuning
	Colour system
	Volume correction
	Decoder (AV2 / AV3)
	System language
	Shipping condition
	Colour system
Volume correction	Volume correction

Adjustments / Configurations (alternatives)			
Basic picture mode (Dynamic / Normal / Cinema / Auto) ● Set for each input signal	Viewing mode	Dynamic	
Adjusts colour, brightness, etc. for each picture mode to suit your taste	Contrast	-	
	Brightness	-	
	Colour	-	
	Sharpness	-	
Adjusts tint of image ● For NTSC signal reception only	Tint		
Chooses the colour balance of the entire image (Cool / Normal / Warm)	Colour balance	Normal	
Automatically adjusts colours to vivid ones (Off / On)	Colour management	On	
Automatically reduces unwanted picture noise (Off / Normal / Dynamic / Auto) ● Not valid on HDMI, PC, and Analogue component signal	P-NR	Auto	
Automatically reduces noise for watching DTV, DVD and VCD (Off / Min / Mid / Max)	MPEG NR	Off	
Automatically makes still pictures and slow pictures look more vivid (Off / On) ● For PAL or NTSC signal reception only ● Not valid on RGB, S-Video, components, PC and HDMI ● Cannot be used with DVB	3D-COMB	On	
Adjusts the output level of deep bass	Bass	-	
Adjusts the output level of high-pitch, shrill sound	Treble	-	
Adjusts volume level of right and left speakers	Balance		
Adjusts the volume of the headphones	Headphone volume	-	
Select stereo / monaural (Mono / Stereo) ● Normally: Stereo ● Stereo signal cannot be received: Mono ● M1 / M2: Available while mono signal is transmitted ● Cannot be used with DVB	MPX	Stereo	
Improves sound quality for music and dramas (Music / Speech)	Mode	Music	
Gives a greater spatial effect by using dynamic enhancer (Off / On)	Ambience	Off	
Chooses according to the signal when HDMI is connected (Auto / Digital / Analogue) (p. 34) ● HDMI2 terminal is for digital signal only	HDMI1 input	Auto	
Chooses the connector to which a Q-Link compatible equipment is connected (Off / AV2 / AV3) (p. 30)	Q-Link	AV2	
Chooses the signal to be transmitted from the TV to Q-Link (Analogue / DVB / AV1 / AV2 / AV3 / AV4 / Monitor) ● Monitor: Image displayed on screen ● Component, PC and HDMI signals cannot be outputted	AV2 out	Monitor	
Control with HDMI function (Off / On) (p. 27)	Control with HDMI	On	
Teletext display mode (TOP (FLOF) / List) (p. 12)	Teletext	TOP	
Sets the time the TV automatically turns Off. (Off / 15 / 30 / 45 / 60 / 75 / 90) (minutes)	Off timer	Off	
Selects teletext language (Analogue) (West / East1 / East2) ● West: English, French, German, Greek, Italian, Spanish, Swedish, Turkish ● East1: Czech, English, Estonian, Lettish, Rumanian, Russian, Ukrainian ● East2: Czech, Hungarian, Lettish, Polish, Rumanian	Text language	West	
Increases the brightness of the side panel (Off / Low / Mid / High) ● The recommended setting is High to prevent panel "after-image"	Side panel	Off	
Reduces brightness of picture to economise on power consumption (Off / On)	Power save	Off	
Edits channels (p. 20)	Programme edit	Access	
Sets channels automatically (p. 20)	Auto setup	Access	
Sets channels manually (p. 20)	Manual tuning	Access	
Fine tuning of channels (during rain, etc.)	Fine tuning		
Selects optional colour system depending on video signals (Auto / PAL / SECAM / M.NTSC)	Colour system	Auto	
Adjusts volume of individual stations	Volume correction		
Set "On" when the decoder is connected to AV2 or AV3 terminal via a Q-Link equipment (Off / On)	Decoder (AV2)	Off	
Edits or setups DVB channels (p. 18)	DVB Setup Menu	Access	
Changes language for on-screen displays	System language	Access	
Resets all settings, for example, when moving (p. 32)	Shipping condition	Access	
Selects optional colour system based on video signals in AV mode	Colour system	Auto	
Adjusts volume for AV, PC, and HDMI mode	Volume correction		

- A different menu will be displayed while PC is used. (p. 25)
- In AV mode, the Sound menu and Setup menu give a smaller number of options.

Advanced DVB Settings



- 1 **Display the menu**
MENU
- 2 **Select "Setup menu"**

Main menu	
☐	Picture menu
	Sound menu
	Setup menu
- 3 **Select "DVB Setup Menu"**

Setup menu	
Q-Link	AV2
AV2 out	Monitor
Control with HDMI	On
Teletext	TOP
Off timer	Off
Side panel	Off
Power save	Off
DVB Setup Menu	Access
System language	
Shipping condition	
- 4 **Select "System Setup" or "System Update"**

DVB Setup Menu	
Profile Edit	
Child Lock	
Tuning Menu	
Tuner Lock	Off
Multi Audio	ger
Subtitles	ger
Teletext	ger
System Setup	Access
System Update	Access
- 5 **Select a function and set**
- 6 **Store**

■ To exit
→ EXIT

OK

● If you exit after 5, the setting is not stored after turning off the TV.

Pay-TV

Common
Interface
Module

Language
of subtitles

Preferred
Language
Setting

Adjust the
time data
automatically

Time Zone

Information
banner
display time

Display
Timeout

Update
TV's
software
system

System
Update

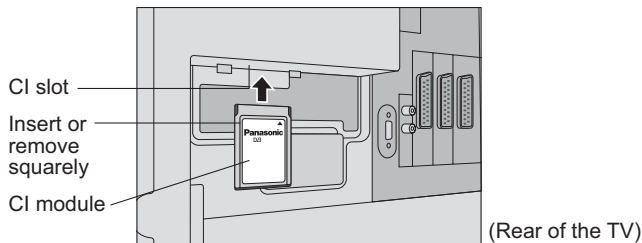
(DVB mode only)

Insert the CI module (optional)

This TV receiver works only Pay TV modules complying with CI standard.

Caution

- Turn Off the On / Off switch on the TV whenever inserting or removing the CI module.
- If a view card and a card reader come as a set, first insert the card reader, then insert the view card into the card reader.



① Select "Common Interface Module"

DVB System Setup	
Common Interface Module	Access
Preferred Language Setting	
Time Zone	Auto
Display Timeout	3 seconds



- For more details, see the manual of the CI module, or check with the broadcaster.
- Normally pay-TV services will appear without following steps 1 and 2 (shown for information only).

② Follow the on-screen instructions

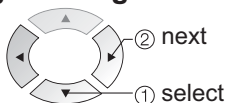
example: select, go → → →

Coloured characters →

- On-screen operation guide may not correspond to the remote control buttons.

① Select "Preferred Language Setting"

DVB System Setup	
Common Interface Module	
Preferred Language Setting	Access
Time Zone	Auto
Display Timeout	3 seconds

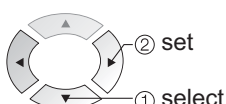


- This is the initial language setting for Audio, Subtitles (p. 11) and Teletext.

② Set the language (Audio, Subtitles, Teletext)

Select "Time Zone" and set the time

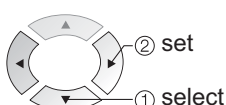
DVB System Setup	
Common Interface Module	
Preferred Language Setting	
Time Zone	Auto
Display Timeout	3 seconds



- Auto : The time data will be adjusted according to your area automatically.
- Others: The time data will be corrected based on GMT.

Select "Display Timeout" and set the time

DVB System Setup	
Common Interface Module	
Preferred Language Setting	
Time Zone	Auto
Display Timeout	3 seconds



- 0 (No display) to 10 sec. in 1-sec. increments
- Information banner (p. 10)

Update the software at appropriate intervals to ensure that the TV's performance and functions are updated. For details (p. 32)

Select "Auto Update Search in Standby" and then select "On" or "Off"

DVB System Update	
Auto Update Search in Standby	On
System Update Search Now	
Software Licence	



- On: Automatically performs a search in standby at 3:00 AM and 5:00 AM and downloads an update, if any

■ To update immediately

→ Select "System Update Search Now" → Searches for an update (for several min.) and displays a corresponding message if any → → Downloads (for about 20 min.)

- The message might be the notification beforehand. In this case, the schedule information (the date that the new version can be used) will appear.

■ View software licence information

→ Select "Software Licence" → Display

Editing and Setting Channels

The current channel settings can be changed according to your needs and reception conditions.



- 1 Display the menu**
MENU
- 2 Select "Setup menu"**
Main menu

□ Picture menu
♪ Sound menu
≡ Setup menu
- 3 Select "Tuning menu"**
Setup menu

Q-Link	AV2
AV2 out	Monitor
Control with HDMI	On
Teletext	TOP
Off timer	Off
Text language	West
Side panel	Off
Power save	Off
Tuning menu	Access
System language	
Shipping condition	
- 4 Select the function**
Tuning menu

Programme edit	Access
Auto setup	
Manual tuning	
Fine tuning	
Colour system	Auto
Volume correction	
Decoder (AV2)	Off
- 5 Set**

Edit channels

Programme edit

- Delete
- Add
- Move
- Change channel number
- Change name
- Lock
- Change sound system
- Download to equipment

Set automatically

Auto setup

Set manually

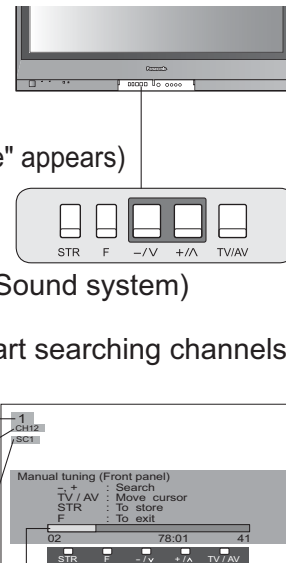
Manual tuning

■ To exit
→ EXIT

For Manual tuning, using the buttons on the TV ("Tuning mode" on p. 7)

- ①  (Press repeatedly until "Tuning mode" appears)
- ②  or  (Access "Manual tuning")
- ③  (Programme, Channel (select), Sound system)
- ④  or  (Change programme or start searching channels)
- ⑤  (Store)
- ⑥ ③-⑤ (Repeat)

■ To return to TV

Programme number (flash)

Channel number (flash)

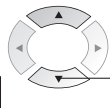
Sound system (flash)

Channel

(Analogue mode)

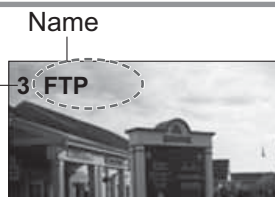
① Select the programme number to edit

Prog.	Chan.	Name	Lock	Sys
1	CH44	ABC	Off	SC1
2	CH51	XYZ	Off	SC1
3	CH41	FTP	Off	SC1
4	CH47	123	Off	SC1
5	CH37	456	Off	SC1



Cursor

Name
Programme number 3 FTP



② Edit

■ **To delete** → red → After confirming, press red

■ **To add** → green → After confirming, press green

■ **To move** → yellow → Select destination → yellow

■ To change channel number

Prog.	Chan.	Name	Lock	Sys
1	CH44	ABC	Off	SC1
2	CH51	XYZ	Off	SC1
3	CH41	FTP	Off	SC1
4	CH47	123	Off	SC1
5	CH37	456	Off	SC1

Select the "Chan." field

Change number (Can also be changed with "C" and number buttons)

■ To change the name of the broadcaster displayed when selecting channels

Prog.	Chan.	Name	Lock	Sys
1	CH44	ABC	Off	SC1
2	CH51	XYZ	Off	SC1
3	CH41	FTP	Off	SC1
4	CH47	123	Off	SC1
5	CH37	456	Off	SC1

Select the "Name" field

Select the character

To next character

Repeat

Usable characters
ABCDEFGHIJKLMNOPQRSTUVWXYZ
0123456789

■ To lock

Prog.	Chan.	Name	Lock	Sys
1	CH44	ABC	Off	SC1
2	CH51	XYZ	Off	SC1
3	CH41	FTP	Off	SC1
4	CH47	123	Off	SC1
5	CH37	456	Off	SC1

Select the "Lock" field

Select "On" ("Off" to unlock)

● You cannot select the channel with number buttons or the "C" button when locked.

■ To change sound system based on signals

Prog.	Chan.	Name	Lock	Sys
1	CH44	ABC	Off	SC1
2	CH51	XYZ	Off	SC1
3	CH41	FTP	Off	SC1
4	CH47	123	Off	SC1
5	CH37	456	Off	SC1

Select the "Sys" field

Select sound system

SC1 : PAL B, G, H / SECAM B, G
SC2 : PAL I
SC3 : PAL D, K / SECAM D, K
F : SECAM L / L'

■ To download channel information to a Q-Link compatible equipment connected to the TV

→ blue → Automatically transmitted (for a few sec.)

● For details (p. 26)

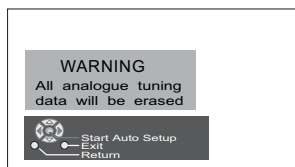
● Not available if "Q-Link" is "Off" in the Setup menu. (p. 16)

③ Store



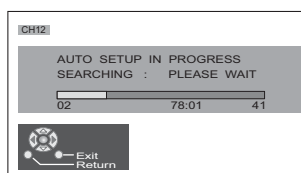
Automatically set the channels received in the area

① Start Auto setup



set

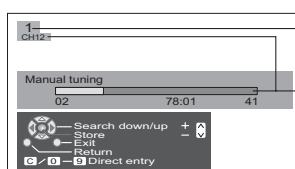
② Settings are made automatically



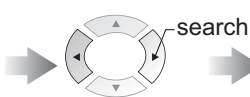
- The settings are downloaded to a Q-Link compatible equipment connected to the TV.
- All previous settings are erased.
- When the sequence is completed, the broadcast of programme number "1" will appear.

To freely change settings after Auto setup

① Select the programme number and search through the channel



Programme number
Channel



② Store



● The programme number blinks.

③ Repeat ① and ②

Note

● If a VCR is connected with only the RF cable, select programme number "0".

Editing and Setting Channels

Your favourite channels can be listed, and children can be prevented from watching specific channels.



1 Display the menu
MENU

2 Select "Setup menu"
Main menu
☐ Picture menu
☒ Sound menu
☒ Setup menu

3 Select "DVB Setup Menu"
Setup menu
 Q-Link AV2 Monitor
 AV2 out On TOP
 Control with HDMI Off
 Teletext Off
 Off timer Off
 Side panel Off
 Power save Off
 DVB Setup Menu Access
 System language
 Shipping condition

4 Select the function
DVB Setup Menu
 Profile Edit Access
 Child Lock Access
 Tuning Menu Off
 Tuner Lock ger
 Multi Audio ger
 Subtitles ger
 Teletext ger
 System Setup
 System Update

5 Set

■ To exit
→ EXIT

List favourite channels

Profile Edit

Prevent children from watching specific channels

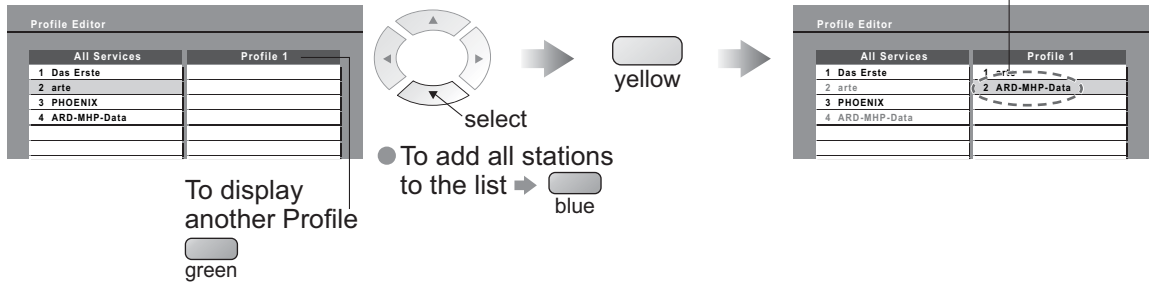
Child Lock

Item	Adjustments / Configurations
Tuner Lock	Prevents you from accidentally changing programme while recording a DVB broadcaster. If the TV is turned to Standby mode while Tuner Lock is On, the DVB tuner will remain active to ensure recording can still take place. ● Use for the recording without watching DVB broadcaster. ● Do not switch the TV Off during recording. ● Even if the TV is switched On or Off, this setting is memorized. ● While recording a DVB programme, it is possible to change to the Analogue programmes to watch.
Multi Audio	Selects from several sound tracks (varies depending on the broadcaster). ● This setting is available only for the present broadcaster.
Subtitles	Selects the language for subtitles (varies depending on the broadcaster). ● This setting is available only for the present broadcaster.
Teletext	Selects the language for teletext mode (varies depending on the broadcaster). ● This setting is available only for the present broadcaster.

(DVB mode)

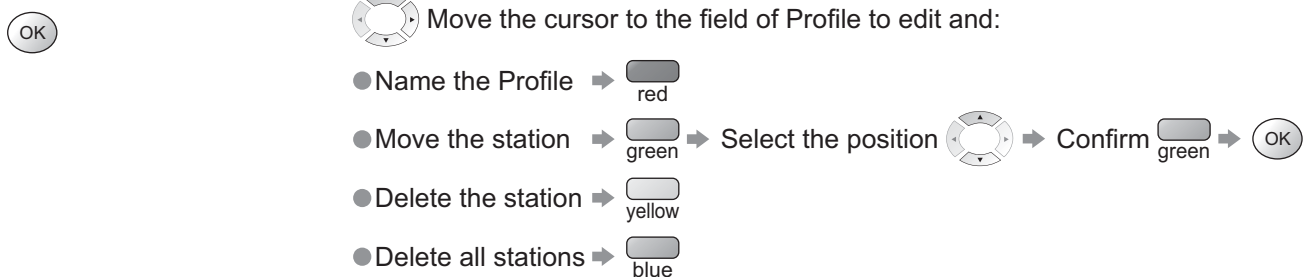
Create your favourite channel list (Profile) from various broadcasters (up to 4: Profile 1 to 4). The list is displayed in information banner (p. 10) and then easily accessed.

① Select a broadcaster and add it to the list



■ To edit Profile

② Store



You can lock specific broadcasters so that children cannot watch them. (When a channel is selected, a message appears; by entering the PIN number, you can watch the channel.)

① Enter the PIN number (4 digits)

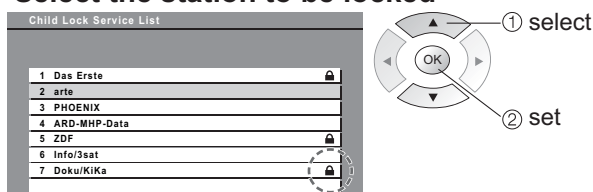


- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it.

② Select "Child Lock Service List"



③ Select the station to be locked



- To cancel → Select the locked station and press OK
- To lock all channels → yellow
- To cancel all channel locks → blue

Appears when the station is locked

■ To change the PIN number

Select "Change PIN" in ② and enter a new PIN number twice.

Note

- Setting "Shipping condition" (p. 32) erases the PIN number and all settings.

Editing and Setting Channels (DVB mode)

You can re-tune all TV channels when moving house or search for new services which may have recently started broadcasting.



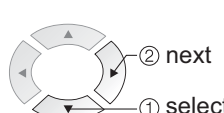
1 Display the menu

MENU

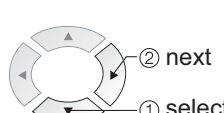


2 Select "Setup menu"

Main menu
☐ Picture menu
☒ Sound menu
☒ Setup menu

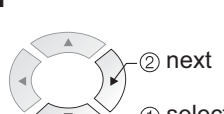


3 Select "DVB Setup Menu"



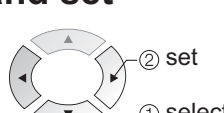
4 Select "Tuning Menu"

DVB Setup Menu
 Profile Edit
 Child Lock
 Tuning Menu
 Tuner Lock
 Multi Audio
 Subtitles
 Teletext
 System Setup
 System Update



5 Select the function and set

DVB Tuning Menu
 Auto Setup
 Add New Service
 Manual Tuning
 New Service Message
 Signal Condition

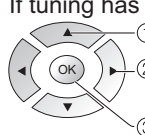
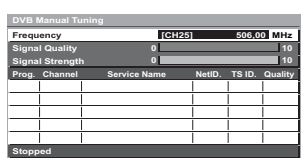


To exit

EXIT



● No data is stored if an Auto Setup sequence is interrupted.

Item	Adjustments / Configurations	
Auto Setup	Automatically sets the DVB channels in the area. ● The current setting is erased. ● If a Child Lock PIN number (p. 22) has been set, it must be entered again.	
Add New Service	Adds a new DVB service. ● A new station is added to the DVB channel list, when found. ● The new station is added with the current settings saved as they are.	
Manual Tuning	Sets the DVB channels manually. Normally use "Auto Setup" or "Add New Service" for the channel setting. If tuning has not done completely, use this function.  	
New Service Message	Selects whether to give a notification message when a new DVB service is found. (On / Off)	(Message example) New DVB Service Found! Press OK to add new service Press EXIT to Ignore
Signal Condition	Selects a channel and checks the DVB signal condition. Use for adjusting the direction of the aerial. Signal Quality: ● Green bar → Good ● Yellow bar → Poor ● Red bar → Bad (Check the aerial) ● To change the programme during the menu appears → 	

Displaying PC Screen on TV

The screen of the PC connected to the TV can be displayed on the TV.
You can also listen to PC sound with the audio cable connected. To connect PC (p. 30)



1

2

TV/AV

AV2

AV1

AV2/S

AV3/S

>>

PC

Displays PC screen

● Select the external input

● Select "PC"

① blue (To next page)

② yellow Press twice

■ To return to TV →

● Corresponding signals (p. 35)

● If "H-freq." or "V-freq." is shown in red, the signals may not be supported.

- PC menu setting (changed as desired)
- Making settings → "How to Use Menu Functions" ① to ④ (p. 16)

Menu	Item		Adjustments / Configurations(options)	
Picture menu	Viewing mode, Contrast, Brightness, Sharpness, Colour balance (p. 16)			
	Advanced setting	W/B High R	White balance of bright red area	① ② ① and ② repeatedly adjusted
		W/B High B	White balance of bright blue area	
		W/B Low R	White balance of dark red area	
		W/B Low B	White balance of dark blue area	
		Gamma	(2.0 / 2.2 / 2.5 / S Curve)	
Setup menu	PC setup		Input resolution	Switches to a wide view ● VGA (640 x 480 dots), WVGA (852 x 480 dots), XGA (1,024 x 768 dots), WXGA (1,366 x 768 dots) ● Options change depending on signals
			Clock	Set to the minimum level if noise occurs
		H-pos	Adjust horizontal position	
		V-pos	Adjust vertical position	
		Clock phase	Eliminate flicker and distortion ● Adjust after Clock adjustment	● Set to the minimum level if noise occurs
		Sync	Chooses another synchronous signal if the image is distorted (H&V / On G) ● H&V : by the horizontal and vertical signals from your PC On G: by the green signal from your PC (if available)	
	Control with HDMI, Volume correction, Side panel, Power save, System language (p. 16)			

- Sound menu (p. 16)

● Displaying PC Screen on TV

● Editing and Setting Channels (DVB)

Advanced

External Equipment

Q-Link

Q-Link interlocks the TV and VCR / DVD recorder, enables easy recording and playback.

■ Condition

- Use the VCR / DVD recorder with the following logos:
"Q-Link", "NEXTVIEWLINK", "DATA LOGIC", "Easy Link", "Megalogic", or "SMARTLINK"
- Connect the equipment to this TV's AV2 or AV3 terminal via a "fully-wired" SCART cable. (p. 28)
- Q-Link terminal setup in Setup menu (Q-Link, AV2/AV3 out). (p. 16)

■ Download analogue channel settings

- Perform Auto setup. (p. 20)
When first using this TV, see "Auto Setup". (p. 9)
- Perform download to the equipment. (p. 20)

■ Features available

Some recording equipments are not applicable. Read the manuals of the equipment.

What you
see is
What you
record

Direct TV Recording:

Recording the current programme in VCR / DVD recorder immediately.



- When Direct TV Recording is performed, the recording equipment is automatically turned on if it is in Standby mode.
- The recording equipment is recording from its own tuner. You can turn the TV off during recording (Analogue only).
- Do not turn the TV off during recording AV source. Otherwise the recording will be stopped.
- When Direct TV Recording is performed while watching DVB channel, the DVB programme position is locked and no other DVB channel can be selected. (but not for the Analogue channel.)

■ To change DVB channel, stop recording



Information
/ Message

Recording information or if recording is not possible, a message is displayed. (Only when the programme number is "0" or "AV mode" for some equipment.)

Power
on link
and Easy
playback

Insert a videocassette or DVD in the recording equipment and it is operated, TV is turned on and input mode is switched automatically so that you can view the content. (Only when TV is in Standby mode.)

Power off
link

When TV is set to Standby mode, the recording equipment is also automatically set to Standby. (Only when the videocassette or DVD is not active.)

• "DATA LOGIC" (a trademark of Metz Corporation)
• "Easy Link" (a trademark of Philips Corporation)
Read the manuals of the equipment too.

• "Megalogic" (a trademark of Grundig Corporation)
• "SMARTLINK" (a trademark of Sony Corporation)

Control with HDMI "HDAVI Control"™*

*Enjoy additional HDMI Inter-Operability with Panasonic products which have "HDAVI Control" function. HDMI connections to some Panasonic equipments (Panasonic DVD Recorder DIGA, Panasonic Player theatre, Panasonic Amplifier, etc.) allow you to enjoy the easy playback or home theatre. About connections, see "Connections" (p. 29). Read the manuals of the equipment too. Non-HDMI-compliant cables cannot be utilized. About applicable equipments, consult your local Panasonic dealer.

Preparations

(For the first time / When adding new equipment, reconnecting equipment or changing setup)

After connection turn the equipment on and then switch the TV on.

Select the input mode to HDMI1 or HDMI2 (p. 14), and make sure that an image is displayed correctly.



- 1 Display the menu**
MENU
- 2 Select "Setup menu"**
Main menu

Home theatre
Picture menu
Sound menu
Setup menu
- 3 Select "Control with HDMI"**
Setup menu

Q-Link	AV2
AV2 out	Monitor
Control with HDMI	On
Teletext	TOP
Off timer	Off
Text language	West
Side panel	Off
Power save	Off
Tuning menu	
System language	
Shipping condition	
- 4 Select "On" (default is On)**

Easy playback

Theatre speaker

Power on link

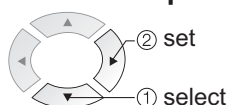
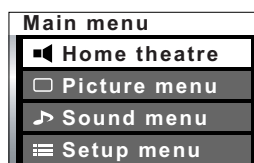
Power off link

Automatic Input switching-When the connected Panasonic equipment is operated, input mode is switched automatically. When it is stopped operating, input mode is returned.

You can control the theatre speaker with TV's remote control.

This function is available when Panasonic Amplifier or Player theatre is connected.

- 1 Display the menu** → MENU
- 2 Select "Home theatre" or "TV speaker"**



■ Home theatre:

Adjustment for equipment (automatically turned on if it is in Standby mode)

Volume up / down → 

Mute → 

■ TV speaker:

TV speakers are active.

- When selecting "Home theatre", the sound of TV speakers is mute.
- When the equipment is turned off, TV speakers will be active.

When the connected Panasonic equipment is operated, TV is also automatically turned on and the content is reproduced. (Only when TV is in Standby mode.)

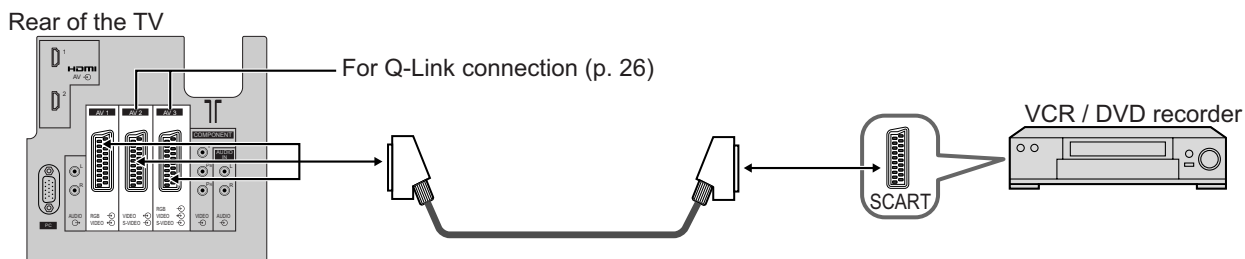
When TV is set to Standby mode, the connected Panasonic equipment is also automatically set to Standby.

External Equipment

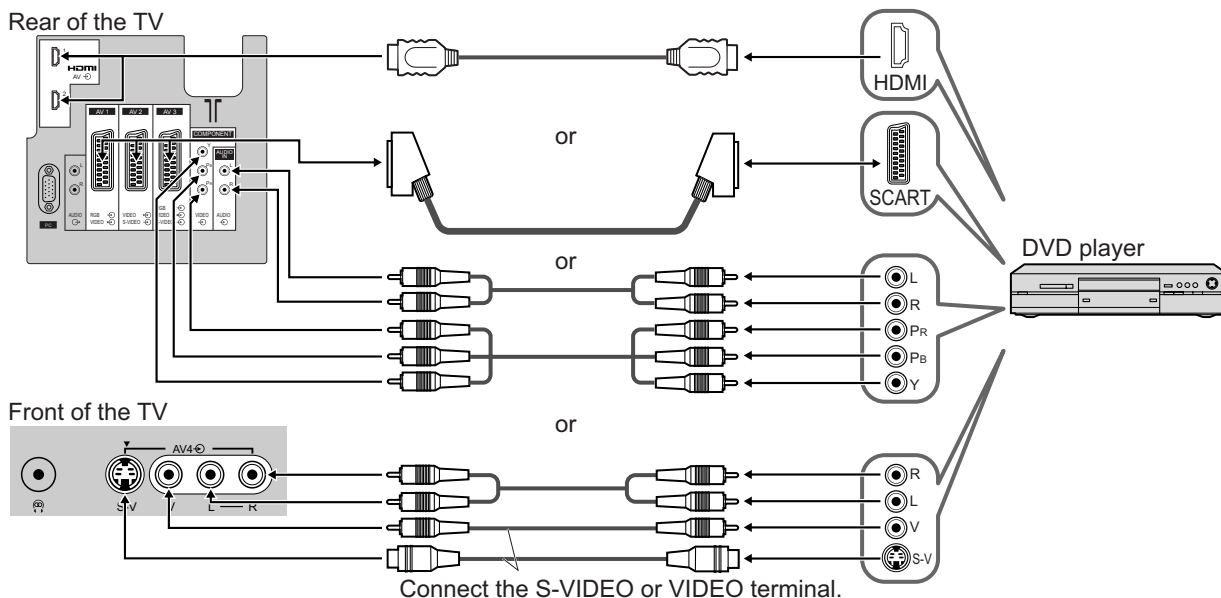
Connections

- External equipments and cables shown are not supplied with this TV.

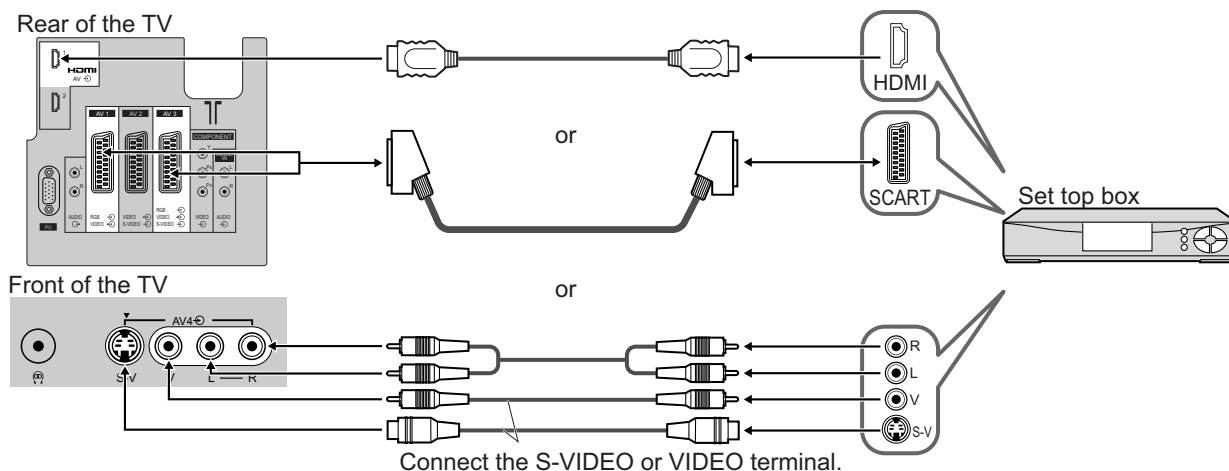
■ Connect VCR / DVD recorder (Recording, Playback)



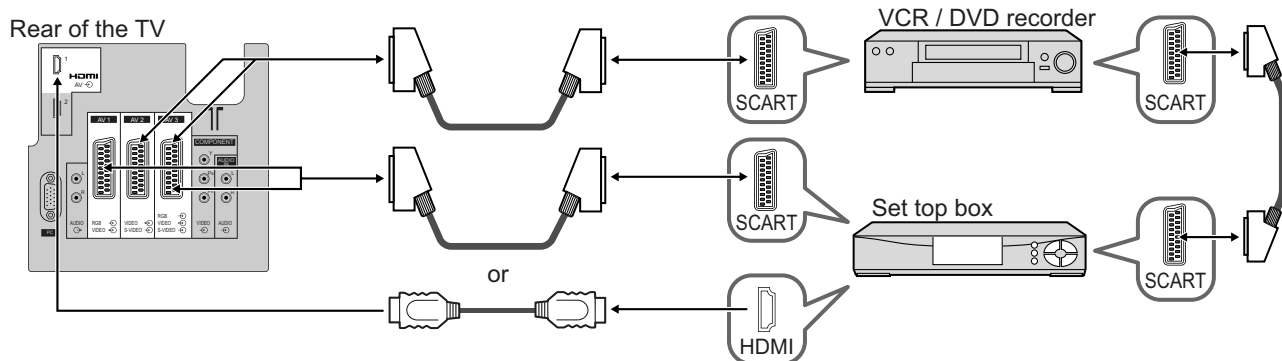
■ Connect DVD player (Playback)



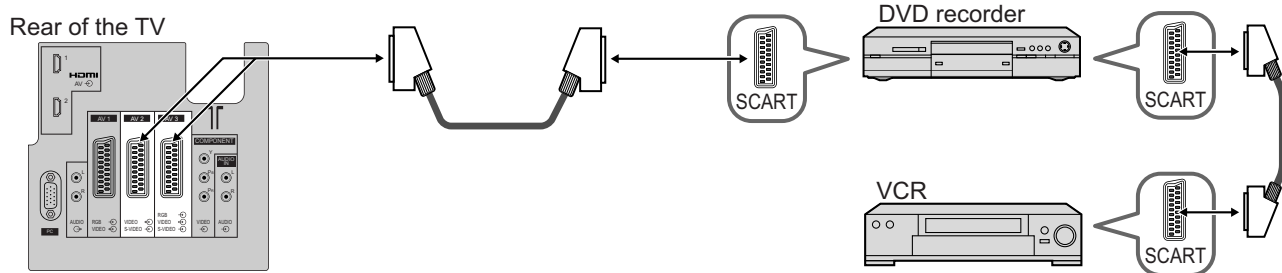
■ Connect Set top box (RGB input)



■ Connect VCR / DVD recorder and Set top box (example)

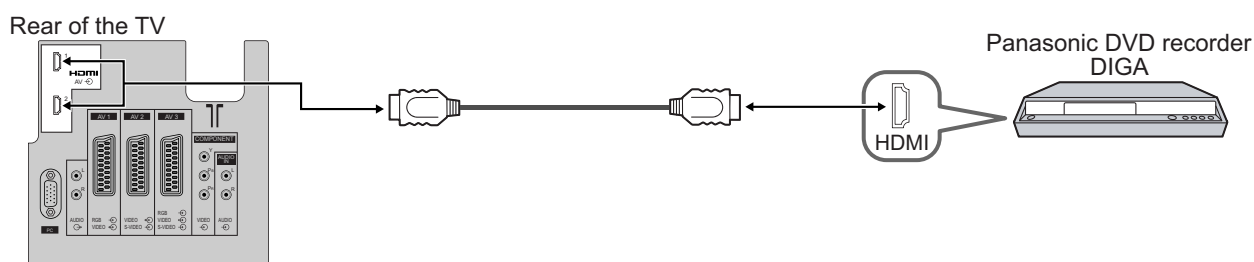


■ Connect DVD recorder and VCR (example)

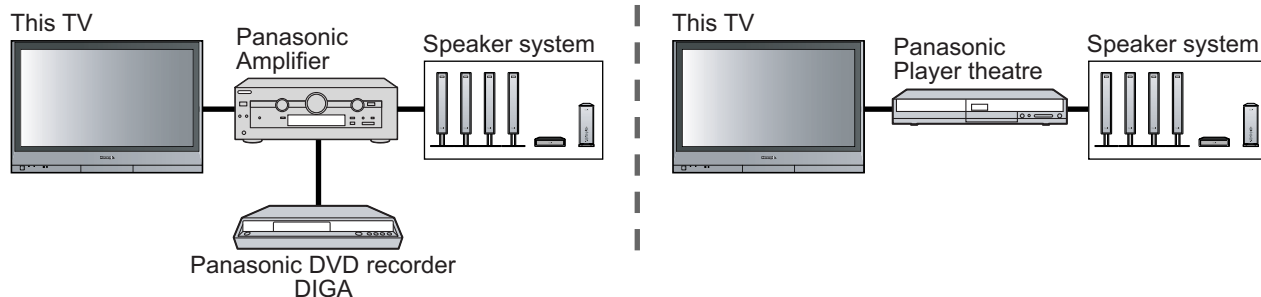


Control with HDMI (p. 27)

■ Easy playback (For connection to HDMI2 terminal, refer to p. 30)



■ Home theatre



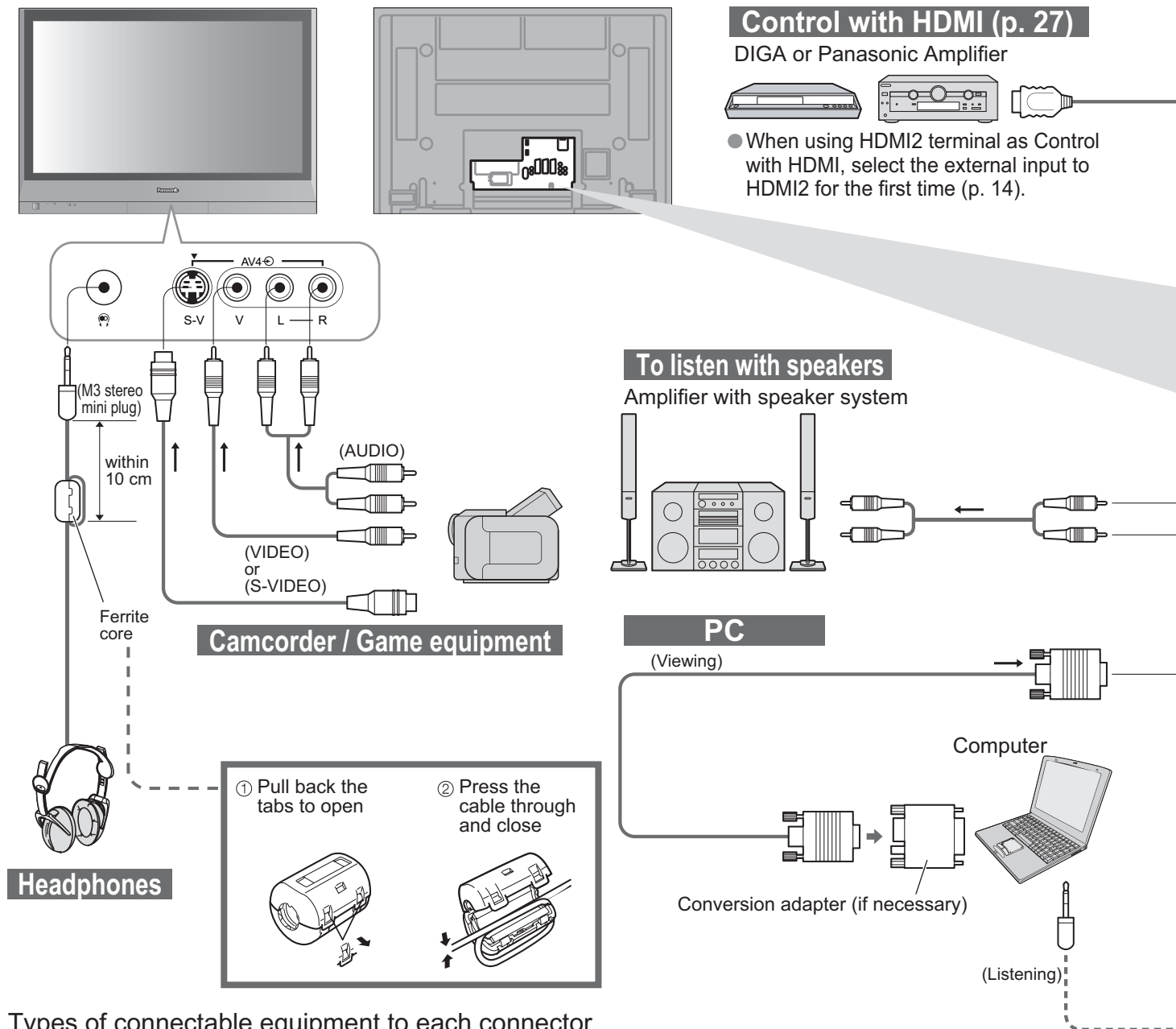
Read the manuals of Panasonic Amplifier or Player theatre for details.

- It is recommended that you use Panasonic's HDMI cable.
 Recommended part number: RP-CDHG15 (1.5 m)
 RP-CDHG30 (3.0 m)
 RP-CDHG50 (5.0 m)

External Equipment

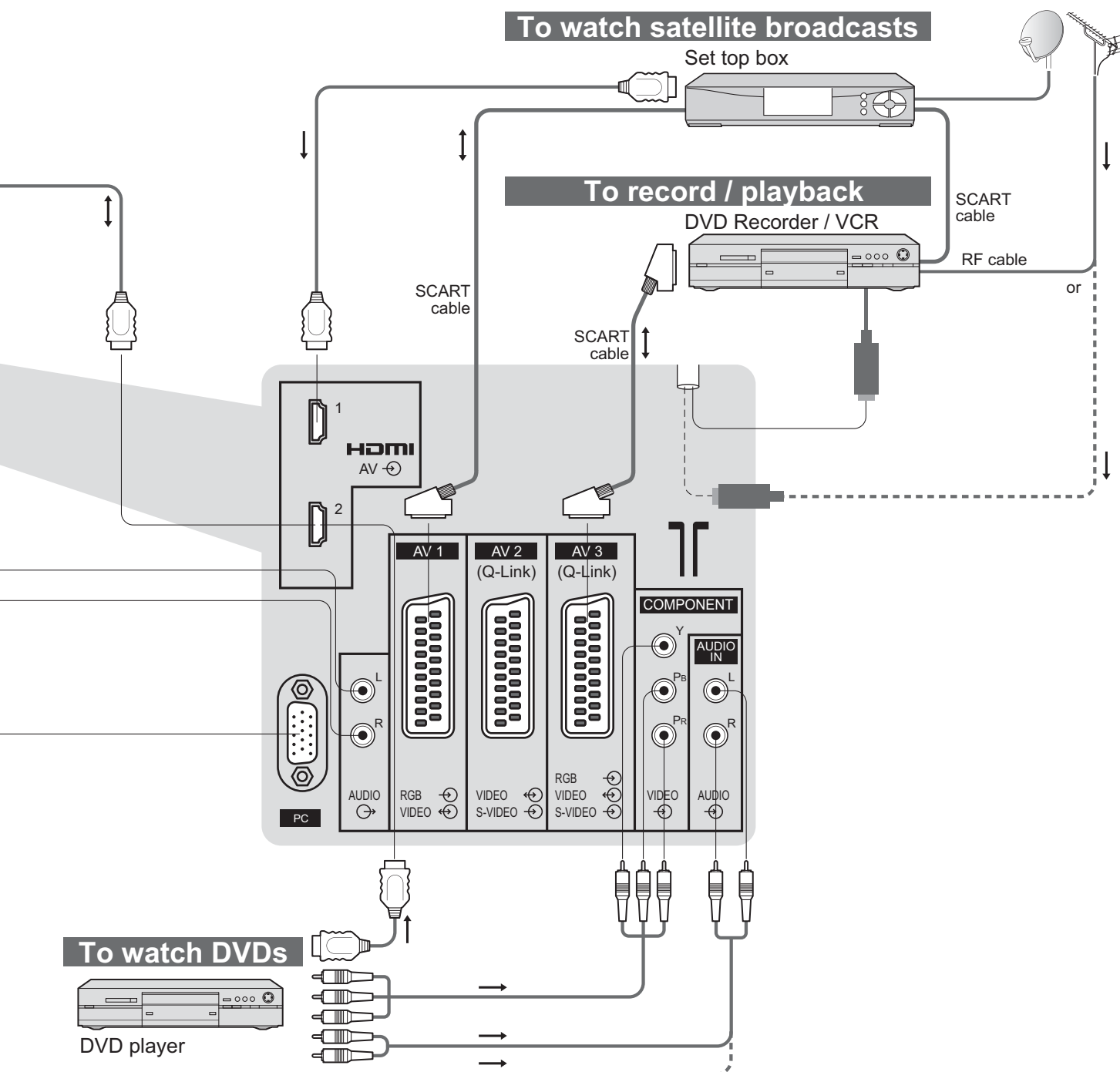
Connections (overview)

These diagrams show our recommendations for how to connect the TV to your various equipment. For other connections, consult the instructions of each equipment, the table below, and the specifications (p. 39).



Types of connectable equipment to each connector

Connector	AV1	AV2	AV3	
Recording / Playback (equipment)				
■ To record / playback videocassettes / DVDs (VCR / DVD recorder)	○	○	○	
■ To watch DVDs (DVD player)	○	○	○	
■ To watch camcorder images (Video camera)	○	○	○	
■ To watch satellite broadcasts (Set top box)	○		○	
■ To play games (Game equipment)	○		○	
■ Q-Link		○	○	
■ Direct TV Recording		○	○	
■ Control with HDMI				



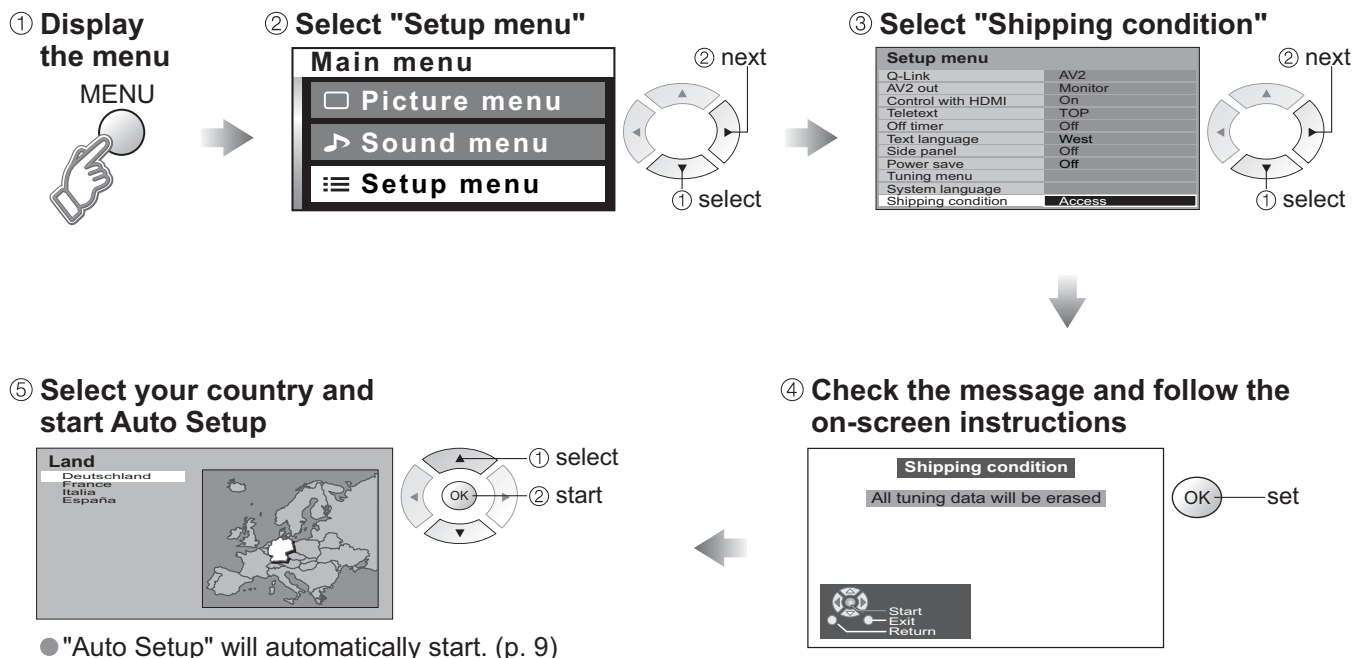
AV4	COMPONENT	HDMI	
		1	2
☐	☐	☐	☐
☐		☐	☐
☐		☐	☐
☐		☐	☐
		☐	☐

○: Recommended Connection

Technical Information

Shipping condition (Restore settings)

Shipping condition will reset all settings, even if Child Lock PIN number (p. 22), clearing all DVB and Analogue tuning data and resetting all control levels back to factory settings.



Updating the software system (DVB mode)

Update system software regularly to ensure that you have latest version software.

If there is an update available, a notification banner is displayed when the channel has the update information.

- To download new software, press "OK" ➔ Downloading (approx. 20 min.)

If you choose not to download, press "EXIT".

■ To update automatically

Set "Auto Update Search in Standby" to "On" (p. 18)

If there is a new version software being broadcast, the TV will download this automatically.

- The automatic updating sequence is carried out at 3:00 AM and 5:00 AM every night under the following conditions.
Standby (TV turned Off with the remote control)
Recording is not in progress.

■ To update manually

Perform "System Update Search Now" (p. 18)

If there is an update available, a notification banner is displayed.

- To download new software, press "OK" ➔ Downloading (approx. 20 min.)
If you choose not to download, press "EXIT".

Note

- During downloading, do not turn Off the TV or touch any button.
(The TV is automatically activated after downloading is completed.)
- The message might be the notification beforehand. In this case, the schedule information (the date that the new version can be used) will appear. You can set the reservation for update. The update will not start when the TV is set to Off.

Aspect Ratio

The optimum size and aspect can be chosen, and you can enjoy finer images. (p. 11)

■ **Auto aspect:** Auto aspect determines the best aspect ratio to use to fill your screen. It does this using a four step process to determine if the picture being viewed is a widescreen picture.

If Auto aspect detects a widescreen signal it switches into the appropriate 16:9 or 14:9 widescreen mode. If Auto aspect does not detect a widescreen signal then this advanced TV enhances the picture for optimum viewing pleasure.

The text shown on the screen indicates how Auto aspect determined which ratio to use:

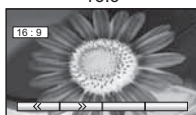
"WIDE" appears in the top left of the screen if a widescreen identification signal (WSS) is found or a signal found through a SCART terminal. Auto aspect switches to the appropriate 16:9 or 14:9 widescreen ratio. This function will also work in any aspect mode. "Auto aspect" appears in the top left of the screen if black stripes above and below the picture are detected. Auto aspect chooses the best ratio and expands the picture to fill the screen. This process can take several minutes, depending on the darkness of the picture.

Signal name		Aspect modes									Aspect Control Signal								
											Widescreen signal (WSS)						Control signal through SCART terminal (pin 8)		
		Auto aspect	16:9	14:9	Just	4:3	4:3 Full	Zoom1	Zoom2	Zoom3	TV	AV1	AV2	AV3	AV4	Component	AV1	AV2	AV3
TV/AV1/AV2/AV3/AV4	PAL	○	○	○	○	○	—	○	○	○	○	○	○	○	○	—	○	○	○
	PAL 525/60	○	○	○	○	○	—	○	○	○	—	—	—	—	—	—	○	○	○
	DVB	○	○	○	○	○	—	○	○	○	○	—	—	—	—	—	—	—	—
	M.NTSC	○	○	○	○	○	—	○	○	○	—	—	—	—	—	—	○	○	○
	NTSC (AV input only)	○	○	○	○	○	—	○	○	○	—	—	—	—	—	—	○	○	○
Component/HDMI	525(480)/60i	○	○	○	○	○	—	○	○	○	—	—	—	—	—	—	—	—	—
	525(480)/60p	○	○	○	○	○	—	○	○	○	—	—	—	—	—	—	—	—	—
	625(576)/50i	○	○	○	○	○	—	○	○	○	—	—	—	—	—	○	—	—	—
	625(576)/50p	○	○	○	○	○	—	○	○	○	—	—	—	—	—	○	—	—	—
	750(720)/50p	○	○	○	○	○	○	○	○	○	—	—	—	—	—	—	—	—	—
	750(720)/60p	○	○	○	○	○	○	○	○	○	—	—	—	—	—	—	—	—	—
	1125(1080)/50i	○	○	○	○	○	○	○	○	○	—	—	—	—	—	—	—	—	—
	1125(1080)/60i	○	○	○	○	○	○	○	○	○	—	—	—	—	—	—	—	—	—
PC input		—	○	—	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—

Note

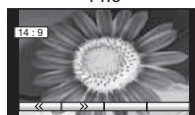
- The ratio varies depending on the programme, etc. If the ratio is greater than the standard "16:9", black bands may appear at the top and bottom of the screen.
- If the screen size looks unusual when a widescreen-recorded programme is played back on a VCR, adjust the tracking of the VCR. (See the VCR manual.)
- To select the ratio manually: (Only "16:9" or "4:3" in PC mode)

16:9



Directly displays the image at "16:9" without distortion (anamorphic).

14:9



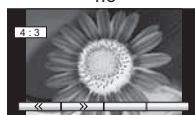
Displays the image at the standard "14:9" without enlargement.

Just



Displays a 4:3 image full-screen. Stretching is only noticeable at the left and right edges.

4:3



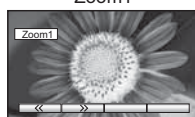
Displays the image at the standard "4:3" without distortion.

4:3 Full



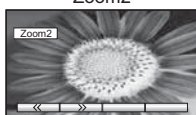
Displays a "4:3" image enlarged horizontally to fit the screen.

Zoom1



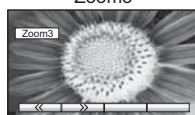
Displays a "16:9" letterbox or "4:3" image without distortion.

Zoom2



Displays a "16:9" letterbox (anamorphic) image full-screen without distortion.

Zoom3



Displays a "2.35:1" letterbox (anamorphic) image full-screen without distortion. At "16:9", displays the image at its maximum (with slight enlargement).

Technical Information

HDMI connection

HDMI (high-definition multimedia interface) allows you to enjoy high-definition digital images and high-quality sound by connecting the TV and the equipment.

HDMI-compatible equipment (*1) with an HDMI or DVI output terminal, such as a set top box or a DVD player, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.

- HDMI is the world's first complete digital consumer AV interface complying with a non-compression standard.
- If the external equipment has only a DVI output, connect to the HDMI1 terminal via a DVI to HDMI adapter cable (*2).
- When the DVI to HDMI adapter cable is used, connect the audio cable to the audio input terminal.
- Audio settings can be made on the "HDMI1 input" menu screen. (p. 16)
- Applicable audio signal sampling frequencies (2ch L.PCM): 48 kHz, 44.1 kHz, 32 kHz

(*1): The HDMI logo is displayed on an HDMI-compliant equipment. (*2): Enquire at your local digital equipment retailer shop.

Note

- HDMI2 terminal is for digital signal only.
- Use with a PC is not assumed.
- The 720p/1080i signals will be reformatted before being displayed on the screen.
- If the connected equipment has an aspect adjustment function, set the aspect ratio to "16:9".
- These HDMI connectors are "type A".
- An equipment having no digital output terminal may be connected to the input terminal of either "Component", "S-VIDEO", or "Video" to receive analogue signals.
- The HDMI input terminal can be used with only the following image signals:
480i, 480p, 576i, 576p, 720p and 1080i. Match the output setting of the digital equipment.
- For details of the applicable HDMI signals, see p. 35.

PC connection

A PC may be connected to this TV so that the PC screen is displayed and sound is heard from the TV.

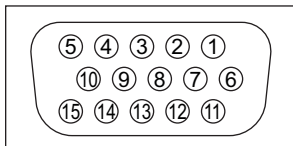
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

Note

- Some PC models cannot be connected to this TV.
- For details of the applicable PC signals, see p. 35.
- Max. display resolution

Aspect	Model No.	TH-42PX45EH
4:3		768 × 768 pixels
16:9		1,024 × 768 pixels

- D-sub 15-pin connector signal



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R	⑥	GND (Ground)	⑪	NC (not connected)
②	G	⑦	GND (Ground)	⑫	NC (not connected)
③	B	⑧	GND (Ground)	⑬	HD/SYNC
④	NC (not connected)	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	NC (not connected)

Control with HDMI

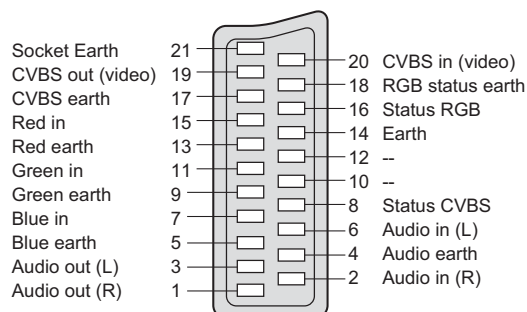
HDMI connections to some Panasonic equipments allow you to enjoy the easy playback or home theatre.

- Setup the equipment to enable this function. Read the manual of the equipment.
- This function may not work normally depending on the equipment condition.
- This function may not work normally when Panasonic Player theatre is connected.
- The equipment can be operated by TV's remote control with this function on even if TV is in Standby mode.
- Image or sound may not be available for the first few seconds when the playback starts.
- Image or sound may not be available for the first few seconds when Input mode is switched.
- Volume function will be displayed when adjusting the volume of the equipment.
- Easy playback is also available by using the remote control for Amplifier. Read the manuals of Amplifier.

SCART and S-video terminal information

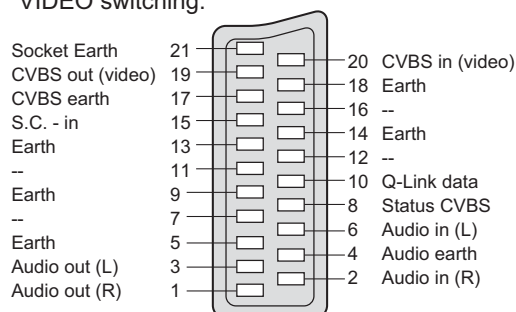
■ AV1 SCART terminal (RGB, VIDEO)

Suitable inputs for AV1 include RGB (Red / Green / Blue).



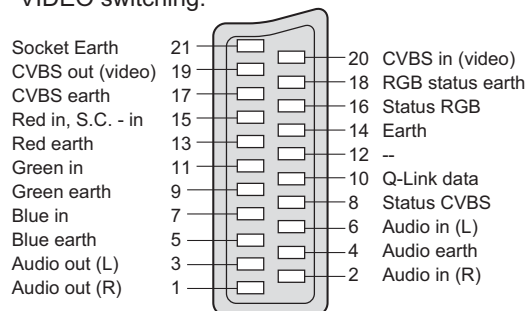
■ AV2 SCART terminal (VIDEO, S-VIDEO, Q-Link)

AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.

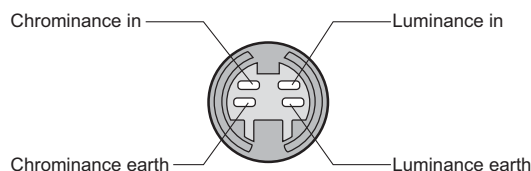


■ AV3 SCART terminal (RGB, VIDEO, S-VIDEO, Q-Link)

AV3 - Pins 15 and 20 are dependent on AV3 S-VHS / VIDEO switching.



■ AV4 S-VIDEO 4 pin terminal



Input signal that can be displayed

* Mark: Applicable input signal for Component (Y, P_B, P_R), HDMI and PC (D-sub 15P)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)	Component	HDMI	PC
525 (480) / 60i	15.73	59.94	*	*	
525 (480) / 60p	31.47	59.94	*	*	
625 (576) / 50i	15.63	50.00	*	*	
625 (576) / 50p	31.25	50.00	*	*	
750 (720) / 60p	45.00	60.00	*	*	
750 (720) / 50p	37.50	50.00	*	*	
1,125 (1,080) / 60i	33.75	60.00	*	*	
1,125 (1,080) / 50i	28.13	50.00	*	*	
640 × 400 @70 Hz	31.46	70.07			*
640 × 480 @60 Hz	31.47	59.94			*
640 × 480 @75 Hz	37.50	75.00			*
800 × 600 @60 Hz	37.88	60.32			*
800 × 600 @75 Hz	46.88	75.00			*
800 × 600 @85 Hz	53.67	85.06			*
1,024 × 768 @60 Hz	48.36	60.00			*
1,024 × 768 @70 Hz	56.48	70.07			*
1,024 × 768 @75 Hz	60.02	75.03			*
1,024 × 768 @85 Hz	68.68	85.00			*
1,280 × 1,024 @60 Hz	63.98	60.02			*
Macintosh13" (640 × 480)	35.00	66.67			*
Macintosh16" (832 × 624)	49.72	74.54			*
Macintosh21" (1,152 × 870)	68.68	75.06			*

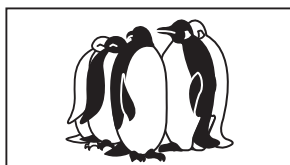
Note

- Signals other than above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.

FAQs

Before requesting service or assistance, please follow these simple guides to resolve the problem. If problem still persists, please contact your local Panasonic dealer or Panasonic Customer Care Centre for assistance.

White spots or shadow images (noise)



- Check the position, direction, and connection of the aerial.

No DVB programmes shown after Auto Setup

- Check the DVB transmitter.
- Adjust the direction of the aerial to another transmitter installed nearby.
- Check the analogue broadcast. If the image quality is poor, check the aerial and consult your nearest dealer.

Interference or frozen / disappearing image in DVB



- Check "Signal Condition". (p. 24) If "Signal Quality" or "Signal Strength" are displayed in red check aerial. If problem persists consult your local Panasonic dealer.
- Turn the TV off with the On / Off switch, then turn it on again.

To customer using indoor aerial

In order to enjoy a good quality DVB image, it is important to receive a good quality DVB signal. For this purpose check "Signal Condition" in Tuning Menu (p. 24). A level of at least 5 is required in order to provide a good picture. It may be necessary to adjust the position and direction of the aerial to achieve the best possible result.

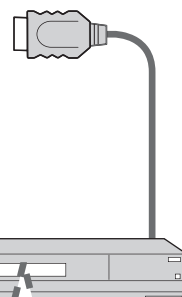
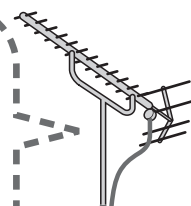


Pictures from an equipment are unusual when the equipment is connected via HDMI

- Is the HDMI cable connected properly? (p. 30)
- Turn Off the TV and equipment, then turn them On again.
- Check an input signal from the equipment. (p. 35)
- Use an equipment compliant with EIA/CEA-861/861B.

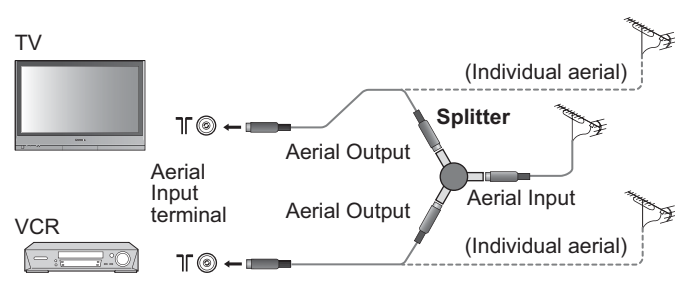
The remote control does not work

- Are the batteries installed correctly? (p. 6)
- Has the TV been switched On?



	Problem	Actions
Screen	VIERA logo appears at the four corners of the screen	● The function to prevent after-image is activated. (Not a faulty symptom) ● The screen saver is activated if the TV is not operated for a certain time in AV mode. ● Contrast is lowered when radio, menu, etc. lasts for several minutes. ● "after-image" (p. 5)
	Contrast is reduced	
	Only one part remains dark	● A pixel or luminescent spot may occasionally be missing in plasma displays. (Not a faulty symptom)
	Chaotic image, noisy	● Set "P-NR" in the Picture menu (to remove noise). (p. 16) ● Check nearby electrical products (car, motorcycle, fluorescent lamp).
	No image can be displayed	● Is "Colour" or "Contrast" in the Picture menu set to the minimum? (p. 16)
	Blurry or distorted image (no sound or low volume)	● Reset channels. (pp. 20 and 24) ● Some programmes may not be received when both Aerial and CATV signals are connected to the TV through a mixer. In this case, connect either Aerial or CATV signal directly to the TV.
Sound	Neither image nor sound is produced	● Is the TV in "AV mode"? ● Is the mains lead plugged into the socket outlet? ● Is the TV turned On? ● Check Picture menu (p. 16) and volume.
	No sound is produced	● Is "Sound Mute" active? (p. 7) ● Is the volume set to the minimum?
	Sound level is low or sound is distorted	● Sound signal reception may be deteriorated. ● Set "MPX" (p. 16) in the Sound menu to "Mono". (Analogue only)
	Whirling sound is heard	● The sound is from built-in cooling fan (not a sign of faulty operation).

FAQs

	Problem	Actions
DVB	Due to the digital reception technologies involved, quality of the DTV signals may be relatively low in some cases, despite good reception of analogue programmes.	
	Unable to receive signals with a high-performance aerial	Install an aerial individually for the TV and VCR (or use a splitter). 
HDMI	Sound is unusual	- Set the sound setting of the connected equipment to "2ch L.PCM". - Check the "HDMI1 input" setting in the Sound menu. (p. 16) - If digital sound connection has a problem, select analogue sound connection. (p. 34)
	An error message appears	Contact the authorized Service Centre.
	"Control with HDMI" function does not work	- Switch the TV on again with the equipment on. - Set "Control with HDMI" to "Off", then set to "On" again. (p. 27)
	TV goes into "Standby mode"	- The sleep function is activated. - The TV enters "Standby mode" about 30 min. after broadcasting ends.
Other	An error message appears	- Follow the message's instructions. - If the problem persists, contact the authorized Service Centre.

Licence

Trademark Credits

- DVB is a trademark of the DVB Digital Video Broadcasting Project (1991 to 1996).
 - VGA is a trademark of International Business Machines Corporation.
 - Macintosh is a registered trademark of Apple Computer, USA.
 - S-VGA is a registered trademark of the Video Electronics Standard Association.
- Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.
- HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
 - HDAVI Control™ is a trademark of Matsushita Electric Industrial Co., Ltd.



Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996)
TH-42PX45EH Declaration of Conformity No 4374, 7 November 2006

Specifications

		TH-42PX45EH
Power Source	Average use	AC 220-240 V, 50 / 60 Hz
	Standby condition	270 W
Power Consumption	Drive method	0.3 W (Without Tuner Lock On) 20 W (With Tuner Lock On)
	Aspect Ratio	AC type
Plasma Display panel	Contrast Ratio	16:9
	Visible screen size	Max 10000:1
Sound	No. of pixels	106 cm
	Speaker	920 mm (W) × 518 mm (H) × 1,056 mm (diagonal)
PC signals	Audio Output	786,432 (1,024 (W) × 768 (H)) [3,072 × 768 dots]
	Headphones	12 cm × 6 cm × 2 pcs, 8 Ω
Receiving Systems / Band name	AV1 (Scart terminal)	20 W (10 W + 10 W), 10% THD
	AV2 (Scart terminal)	M3 (3.5 mm) stereo mini Jack × 1
Aerial - Rear	AV3 (Scart terminal)	VGA, SVGA, XGA
	VIDEO	SXGA (compressed)
Operating Conditions	COMPONENT	Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz
	HDMI1/2	
Connection Terminals	PC	
	AUDIO L - R	
Dimensions (W × H × D)	Output AUDIO L - R	
	Weight	

Note

- Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.
- This equipment complies with the EMC standards listed below.
EN55013, EN61000-3-2, EN61000-3-3, EN55020, EN55022, EN55024.

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Customer's Record

The model number and serial number of this product may be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number _____

Serial Number _____